

LOADING AND BRACING (TL & LTL) IN CLOSED OR OPEN TOP VAN TRAILERS • OF MXU-650/B AND MXU-651/B AIRFOIL GROUPS PACKAGED IN METAL DRUMS (PALLETIZED AND UNPALLETIZED)

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- **CAUTION:** THE PROCEDURES SHOWN HEREIN ARE ONLY APPLICABLE FOR HIGHWAY MOVEMENTS; NOT FOR TRAILER-ON-FLAT-CAR MOVEMENTS.

U. S. ARMY MATERIEL COMMAND DRAWING

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DO NOT SCALE

SEE THE REVISION LISTING ON PAGE 2

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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 OUTLOADING PROCEDURES SPECIFIED WITHIN THIS DRAWING ARE APPLICABLE TO THE MXU-650/B AIRFOIL GROUPS PACKAGED IN 55-GALLON METAL DRUM AND THE MXU-651/B AIRFOIL GROUPS PACKAGED IN 80-GALLON METAL DRUM (UNPALLETIZED AND PALLETIZED). THESE PROCEDURES WILL ALSO APPLY TO OTHER ITEMS WHEN PACKAGED IN 55-GALLON OR 80-GALLON METAL DRUMS. SUBSEQUENT REFERENCE TO CONTAINER MEANS DRUM WITH CONTENTS.

- C. FOR DETAILS OF THE MXU-650/B AIRFOIL GROUPS PACKAGED IN THE 55-GALLON METAL DRUM, SEE U S AIR FORCE DRAWING NO. 763559 AND THE DETAIL ON PAGE 3.

CONTAINER DIMENSIONS - - 25-1/2" DIAMETER X 34-1/2" HIGH.
 GROSS WEIGHT - - - - - 154 POUNDS (APPROX).
 PALLET UNIT - - - - - 52-1/2" WIDE X 27" LONG X 37-1/2"
 HIGH.
 GROSS WEIGHT - - - - - 383 POUNDS (APPROX).

- D. FOR DETAILS OF THE MXU-651/B AIRFOIL GROUPS PACKAGED IN THE 80-GALLON METAL DRUM, SEE U S AIR FORCE DRAWING NO. 763559 AND THE DETAIL ON PAGE 3.

CONTAINER DIMENSIONS - - 33-1/8" DIAMETER X 41-1/2" HIGH.
 GROSS WEIGHT - - - - - 196 POUNDS (APPROX).
 PALLET UNIT - - - - - 67-3/4" WIDE X 34-5/8" LONG X
 46-3/4" HIGH.
 GROSS WEIGHT - - - - - 492 POUNDS (APPROX).

- E. THE LOADS AS SHOWN HEREIN ARE FOR CLOSED OR OPEN TOP VAN TRAILERS WHICH ARE 89" TO 93" WIDE (INSIDE DIMENSION) AND OF VARIOUS LENGTHS, UP TO AND INCLUDING 45'-0" LONG. THEY ARE LIMITED TO HIGHWAY MOVEMENT ONLY. THE DEPICTED LOADS ARE BASED ON TRAILERS OF THE CONVENTIONAL TYPE OR ARE BASED ON TRAILERS WHICH ARE EQUIPPED WITH SELF-CONTAINED MECHANICAL BRACING DEVICES (CROSS MEMBERS AND WALL MEMBERS) AND APPLY TO TRAILERS HAVING WOOD, WOOD AND METAL, OR ALL METAL FLOORS.

- F. THE OUTLOADING PROCEDURES DELINEATED ON PAGES 4 THRU 11, 16 THRU 25 AND 30 THRU 31 ARE FOR CONVENTIONAL VAN TRAILERS.

- G. THE OUTLOADING PROCEDURES DELINEATED ON PAGES 12 THRU 15 AND 26 THRU 29 ARE FOR TRAILERS EQUIPPED WITH VARIOUS TYPES OF SELF-CONTAINED MECHANICAL BRACING DEVICES, AND ARE LIMITED TO HIGHWAY MOVEMENT ONLY. THE HEIGHT REQUIREMENTS SPECIFIED WITHIN THIS DRAWING FOR THE INSTALLATION OF CROSS MEMBERS ARE IDENTICAL TO THOSE RECOMMENDED BY THE BUREAU OF EXPLOSIVE PHAMPHLET 6C. CAUTION: TRAILERS EQUIPPED WITH WALL MEMBERS WHICH DO NOT MEET THE LOCATION REQUIREMENTS MUST NOT BE USED.

- 1. VOIDS LENGTHWISE IN THE LOAD MUST BE HELD TO A MINIMUM. CROSS MEMBERS MUST BE PLACED AGAINST THE LADING AS TIGHTLY AS THE HOLE SPACING IN THE CROSS MEMBER ATTACHMENT FACILITY PERMITS. EACH CROSS MEMBER WILL BE INSTALLED WITH THE ENDS ATTACHED AS NEARLY AS POSSIBLE IN "MATED" POSITIONS (AT EQUAL HEIGHTS AND AT EQUAL DISTANCES FROM THE END OF THE TRAILER).

(CONTINUED AT RIGHT)

MATERIAL SPECIFICATIONS

LUMBER - - - - - : SEE TM 743-200-1 (DUNNAGE LUMBER) AND FED SPEC MM-L-751.

NAILS - - - - - : FED SPEC FF-N-105; COMMON.

PLYWOOD - - - - - : COMMERCIAL ITEM DESCRIPTION A-A-55057, TYPE A, CONSTRUCTION AND 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.

STRAPPING, STEEL - - : ASTM D3953; FLAT STRAPPING, TYPE 1, HEAVY DUTY, FINISH A, B (GRADE 2), OR C.

SEAL, STRAP - - - - : ASTM D3953; CLASS H, FINISH A, B (GRADE 2), OR C, DOUBLE NOTCH TYPE, STYLE I, II, OR IV.

WIRE, CARBON STEEL - : ASTM A853; ANNEALED AT FINISH, BLACK OXIDE FINISH, .0800" DIA, GRADE 1006 OR BETTER.

- 2. CROSS MEMBERS IN EMPTY TRAILERS AND THOSE NOT USED IN LOADED TRAILERS MUST BE SECURED FOR SHIPMENT. COMPONENTS ASSIGNED TO EACH TRAILER MUST REMAIN THEREWITH EVEN THOUGH UNUSED DURING SOME SHIPMENTS.

- 3. ONE CROSS MEMBER WILL BE REQUIRED FOR EACH 10,000 POUNDS OF LADING, AND SHOULD NOT BE RELIED UPON TO RETAIN A GREATER WEIGHT. CROSS MEMBERS WILL NOT BE DOUBLED; THAT IS, TWO CROSS MEMBERS AT THE SAME HEIGHT LOCATION WILL NOT BE PLACED SIDE BY SIDE.

- H. SELECTION OF A VEHICLE TO BE USED TO TRANSPORT THE DESIGNATED ITEM MUST COMPLY WITH AR 55-355, CHAPTER 29, FOR EXPLOSIVES AND OTHER DANGEROUS ARTICLES, IN FULL.

- J. THE GROSS WEIGHT AND AXLE DISTRIBUTION OF WEIGHT FOR A LOAD WILL BE THE RESPONSIBILITY OF THE CARRIER. THE CARRIER WILL ADVISE THE SHIPPER OF THE APPLICABLE LOADING REQUIREMENTS, AND THE SHIPPER WILL LOAD ACCORDINGLY. THE TOTAL WEIGHT OF THE LADING, DUNNAGE, TRACTOR, AND SEMI-TRAILER CARRYING THE LADING MUST NOT EXCEED THE MAXIMUM GROSS WEIGHT ALLOWED FOR THE STATE OR STATES THRU WHICH THE LOAD IS TO BE TRANSPORTED BY MOTOR CARRIER. LIKEWISE, THE GROSS WEIGHT ON A SINGLE OR TANDEM AXLE MUST NOT EXCEED THE MAXIMUM ALLOWABLE WEIGHT. IF THERE IS ANY DOUBT AS TO WHETHER ANY AXLES ARE OVER-LOADED, OR ANY DOUBT AS TO WHETHER THE TOTAL GROSS WEIGHT EXCEEDS THE MAXIMUM ALLOWED, PROPER WEIGHT DISTRIBUTION SHOULD BE VERIFIED BY ACTUALLY WEIGHING THE LOADED VEHICLE.

- K. THE NUMBER OF LADING UNITS MAY BE ADJUSTED TO SUIT THE CAPACITY OF THE TRAILER BEING LOADED OR THE QUANTITY TO BE SHIPPED. HOWEVER, THE APPROVED METHODS SPECIFIED HEREIN MUST BE FOLLOWED AS CLOSELY AS POSSIBLE FOR BLOCKING, BRACING, AND STAYING OF THE LOAD.

- L. OTHER TYPES OF LADING ITEMS MAY BE LOADED INTO TRAILERS WHICH ARE PARTIALLY LOADED WITH THE DESIGNATED ITEMS, PROVIDING THE TOTAL LOAD IS COMPATIBLE, EXISTING DIRECTIVES ARE NOT VIOLATED, AND THE OTHER LADING ITEMS ARE BLOCKED AND BRACED EQUAL TO THE BLOCKING AND BRACING CRITERIA SPECIFIED HEREIN.

- M. FOR TRAILERS NOT EQUIPPED WITH TRAILER POSTS, THE REAR BLOCKING MUST BE EXTENDED TO CONTACT THE REAR DOORS WHEN CLOSED.

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

- O. NOTICE: A STAGGERED NAILING PATTERN WILL BE USED WHENEVER POSSIBLE WHEN NAILS ARE DRIVEN INTO JOINTS OF DUNNAGE ASSEMBLIES. ALSO, A STAGGERED NAILING PATTERN WILL BE USED WHEN DUNNAGE IS NAILED TO THE FLOOR OF THE TRANSPORTING VEHICLE, 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.

- P. PORTIONS OF THE TRAILER BODIES DEPICTED WITHIN THIS PROCEDURAL DRAWING, SUCH AS ONE OF THE SIDEWALLS, HAVE NOT BEEN SHOWN IN THE LOAD VIEWS FOR CLARITY PURPOSES.

- Q. WHEN STEEL STRAPPING IS SEALED AT AN END-OVER-END 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.

- R. THE 55-GALLON METAL DRUM IS DESIGNED TO "NEST" WHEN STACKED, THEREFORE NO DECKING IS REQUIRED BETWEEN LAYERS. THE 80-GALLON DRUM IS AN OPEN HEAD TYPE AND WILL NOT NEST. DECKING IS REQUIRED WHEN STACKING THIS DRUM.

- S. FOR ADDITION GUIDANCE, ATTENTION IS DIRECTED TO THE "SPECIAL NOTES" SECTIONS, WHICH ARE IMMEDIATELY ADJACENT TO THE DEPICTED OUTLOADING METHODS.

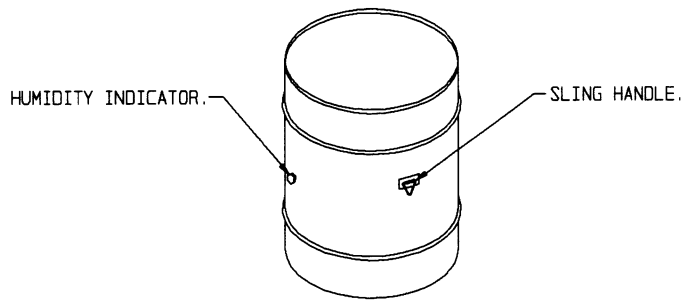
REVISIONS

REVISION NUMBER 1, DATED JUNE 1982, CONSISTS OF:

- 1. ADDING PROCEDURES FOR THREE LAYER LOAD.
- 2. ADDING AN ALTERNATIVE RISER ASSEMBLY.
- 3. RE-DESIGNING THE REAR BLOCKING FOR LESS THAN FULL TRUCKLOADS.

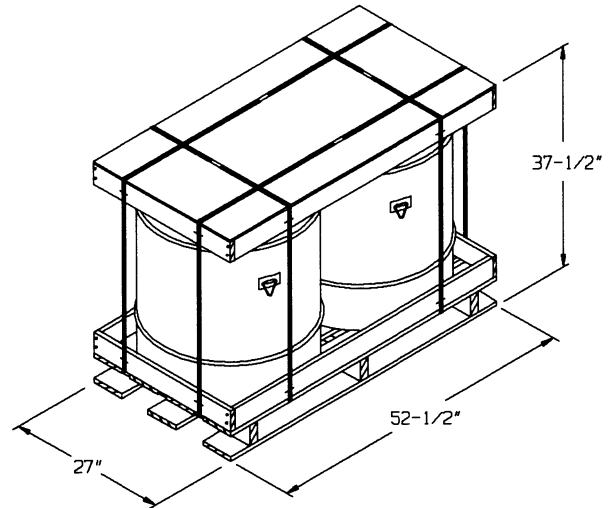
REVISION NUMBER 2, DATED MAY 1995, CONSISTS OF:

- 1. ADDING PROCEDURES FOR PALLETIZED UNITS.



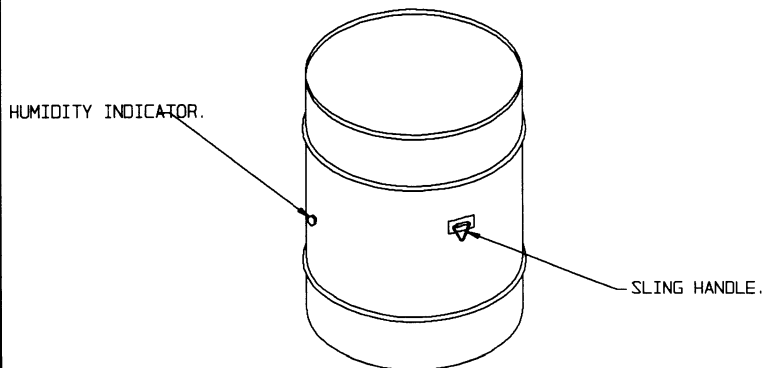
AIRFOIL GROUP MXU-650/B

25-1/2" DIA BY 34-1/2" HIGH
 CUBE - - - - - 12.23 CU. FT. (APPROX)
 GROSS WEIGHT - - 154 LBS (APPROX)



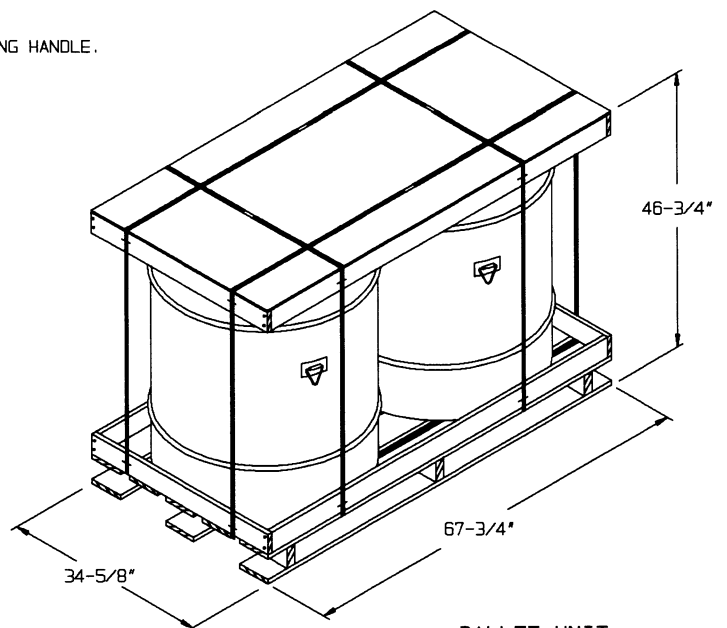
PALLET UNIT

CUBE - - - 30.76 CU. FT. (APPROX)
 WEIGHT - - 383 POUNDS (APPROX)



AIRFOIL GROUP MXU-651/B

33-1/8" DIA BY 41-1/2" HIGH
 CUBE - - - - - 26.35 CU. FT. (APPROX)
 GROSS WEIGHT - - 196 LBS (APPROX)

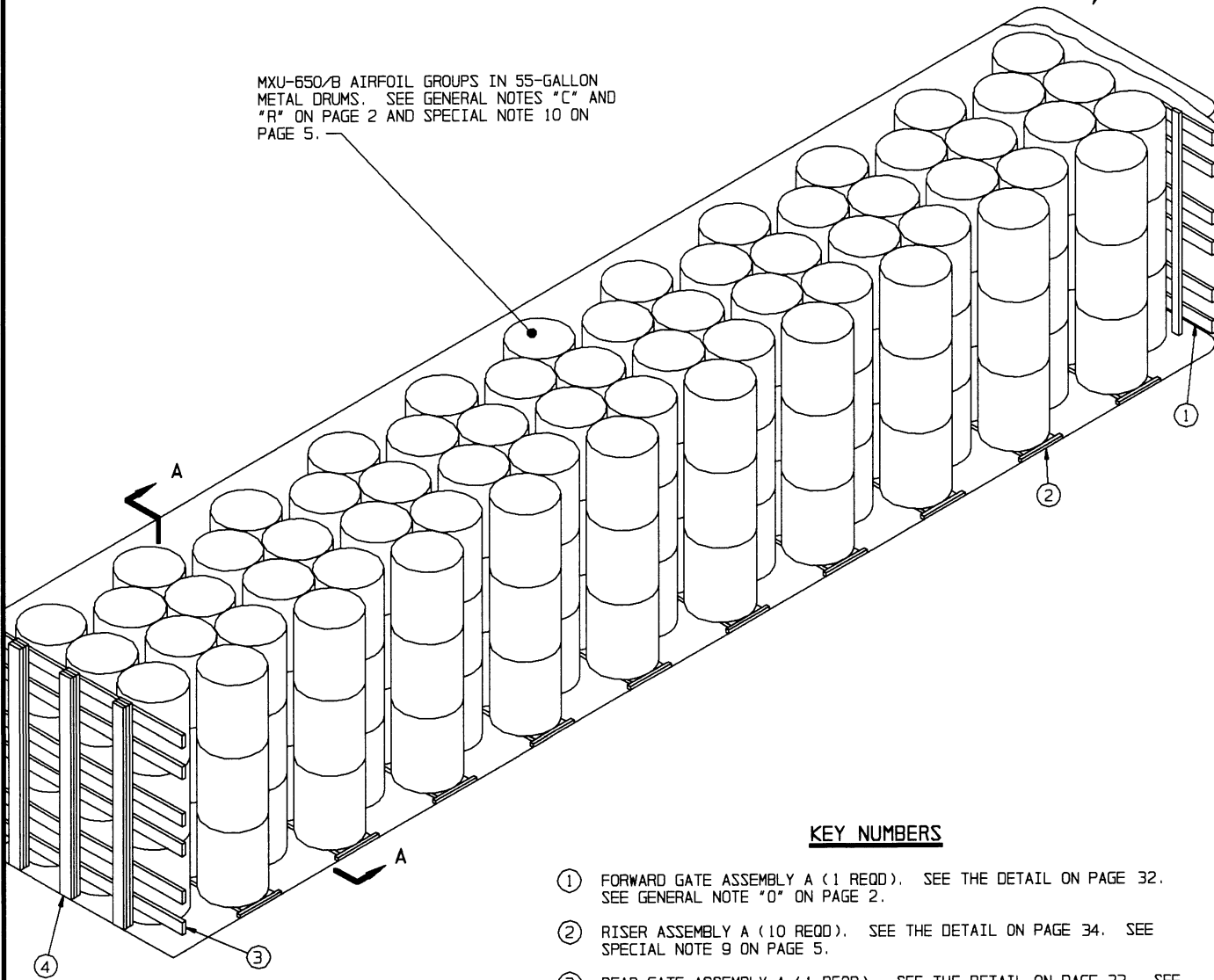


PALLET UNIT

CUBE - - - 63.47 CU. FT. (APPROX)
 WEIGHT - - 492 POUNDS (APPROX)

FORWARD END OF TRAILER. →

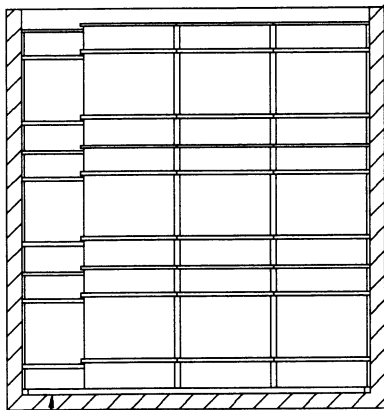
MXU-650/B AIRFOIL GROUPS IN 55-GALLON METAL DRUMS. SEE GENERAL NOTES "C" AND "R" ON PAGE 2 AND SPECIAL NOTE 10 ON PAGE 5.



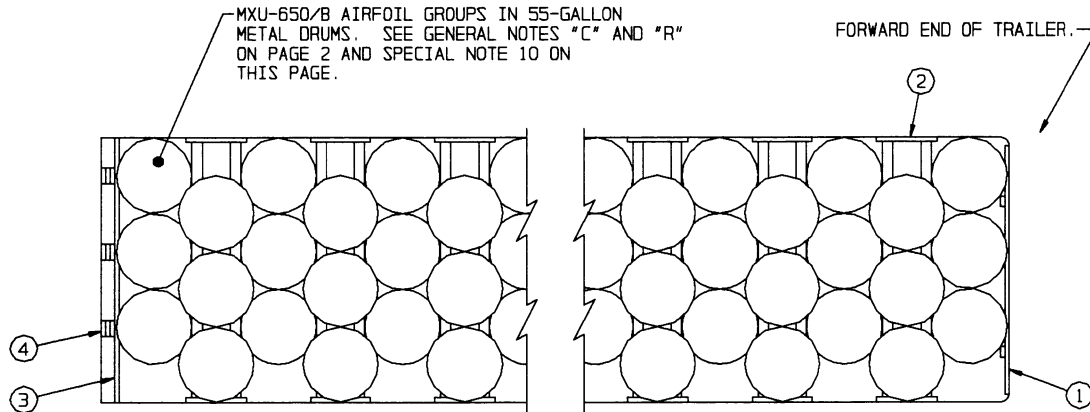
KEY NUMBERS

- ① FORWARD GATE ASSEMBLY A (1 REQD). SEE THE DETAIL ON PAGE 32. SEE GENERAL NOTE "O" ON PAGE 2.
- ② RISER ASSEMBLY A (10 REQD). SEE THE DETAIL ON PAGE 34. SEE SPECIAL NOTE 9 ON PAGE 5.
- ③ REAR GATE ASSEMBLY A (1 REQD). SEE THE DETAIL ON PAGE 33. SEE SPECIAL NOTE 7 ON PAGE 5.
- ④ SOLID FILL, 6" WIDE MATERIAL BY THICKNESS AND LENGTH-TO-SUIT (AS REQD TO FILL THE VOID BETWEEN THE REAR GATE AND REAR DOORS OF TRAILER, WHEN CLOSED). NAIL TO REAR GATE OR SELF W/7-10d NAILS IN EACH PIECE. SEE GENERAL NOTE "O" ON PAGE 2 AND SPECIAL NOTE 7 ON PAGE 5.

ISOMETRIC VIEW



SECTION A-A



PARTIAL PLAN VIEW

SPECIAL NOTES:

(SPECIAL NOTES CONTINUED)

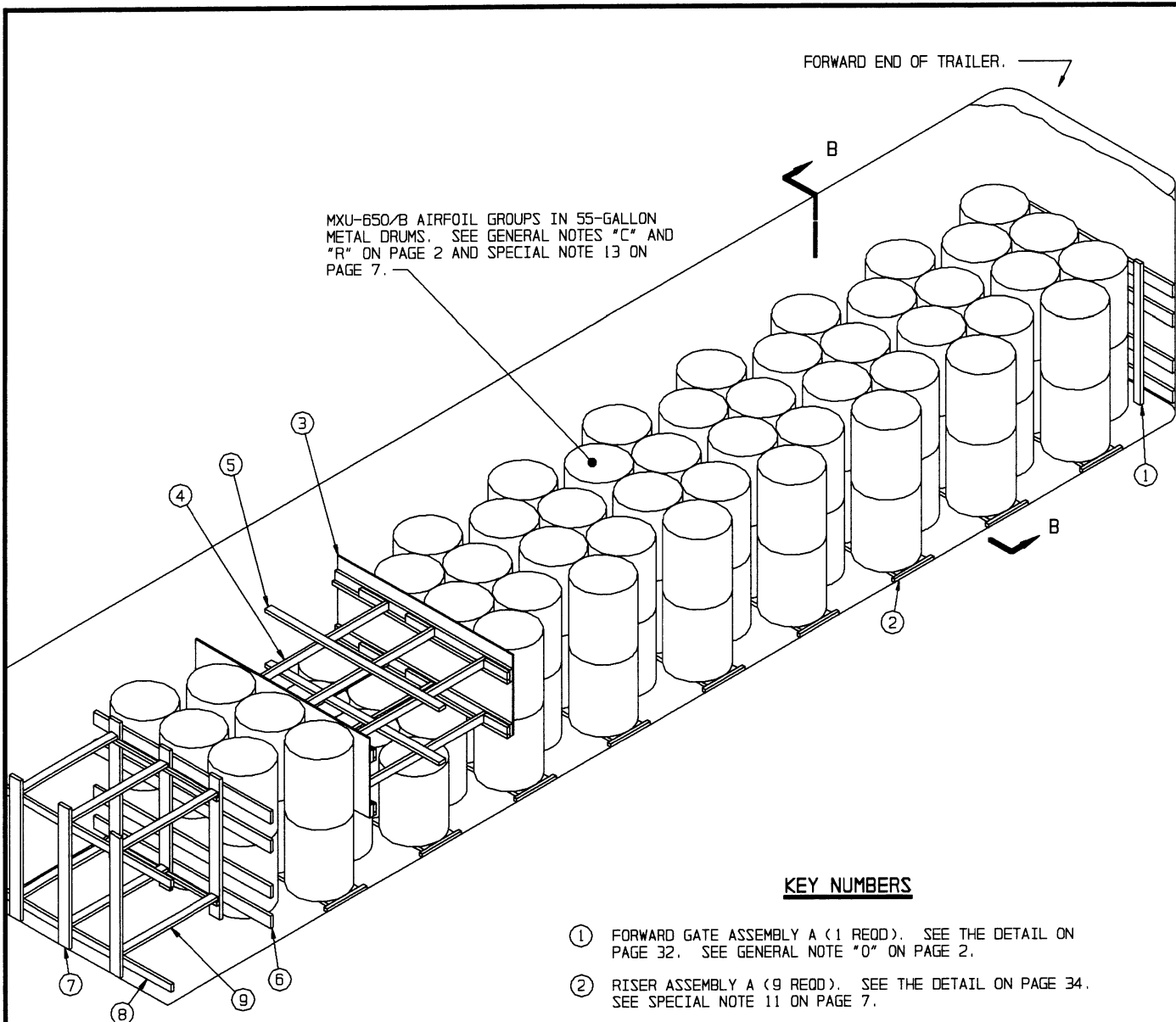
1. A LOAD OF 189 MXU-650/B AIRFOIL GROUPS IN 55-GALLON METAL DRUMS (UNPALLETIZED) IS SHOWN IN A 7'-6" WIDE BY 8'-9" HIGH (INSIDE DIMENSION) BY 40'-0" LONG HIGH-VOLUME CONVENTIONAL VAN TRAILER.
2. A WIDER OR NARROWER TRAILER CAN BE USED FOR SHIPPING THE DEPICTED LOAD BY ADJUSTING THE WIDTH AND/OR LENGTH OF PIECES MARKED ①, ②, AND ③.
3. IF THE SPACE BETWEEN THE REAR OF THE LOAD AND THE TRAILER DOORS, WHEN CLOSED, IS GREATER THAN 12", USE REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 6.
4. AN "OMITTED DRUM ASSEMBLY", AS SHOWN IN THE LOAD ON PAGE 14, MAY BE USED IN THE TOP LAYER OF THE LOAD, AS REQUIRED. SEE THE "OMITTED DRUM ASSEMBLY" ON PAGE 39 AND SPECIAL NOTE 3 ON PAGE 14.
5. FOR METHODS OF BLOCKING LESS-THAN-TRAILER LOADS, SEE THE PROCEDURES ON PAGES 6 THROUGH 11 AND SPECIAL NOTES 4 AND 8 ON THIS PAGE.
6. THE PROCEDURES SHOWN ON PAGE 4 MAY BE USED IN TRAILERS HAVING NAILABLE OR NON-NAILABLE FLOORS.
7. THE STRUT LEDGERS MUST BE OMITTED FROM THE REAR GATE ASSEMBLY "A" WHEN USING SOLID FILL.
8. TO SATISFY THE QUANTITY OF METAL DRUMS TO BE SHIPPED, THE THIRD LAYER OR THE SECOND LAYER AND THIRD LAYER MAY BE OMITTED FROM THE LOAD ON PAGE 4. SEE THE "FORWARD GATE ASSEMBLY A" ON PAGE 32 AND THE "REAR GATE ASSEMBLY A" ON PAGE 33 FOR "ONE LAYER LOAD" AND "TWO LAYER LOAD" GATE ASSEMBLIES.
9. IF DESIRED, THE "ALTERNATIVE RISER ASSEMBLY" SHOWN ON PAGE 34 MAY BE USED IN LIEU OF THE "RISER ASSEMBLY A" SHOWN IN THE LOAD ON PAGE 4.
10. WHEN LOADING THE TRAILER, POSITION THE FIRST THREE BOTTOM DRUMS AT THE FORWARD END AGAINST THE FORWARD GATE ASSEMBLY "A". EQUAL SPACE MUST BE MAINTAINED BETWEEN DRUMS DEPENDING ON THE INSIDE WIDTH OF THE TRAILER. NEXT, POSITION THE BOTTOM THREE DRUMS IN THE SECOND ROW TO NEST BETWEEN THE FIRST THREE DRUMS. MAKE ADJUSTMENTS TO THE SPACE BETWEEN THE FIRST SIX DRUMS AS NECESSARY TO FORM THE CONFIGURATION SHOWN IN THE "PARTIAL PLAN VIEW" ON THIS PAGE. PROCEED WITH THE REMAINDER OF THE LOAD.
11. IF THE TRAILER BEING OUTLOADED CONTAINS MECHANICAL BRACING DEVICES AS DESCRIBED IN GENERAL NOTE "G" ON PAGE 2, SEE THE LOADS SHOWN ON PAGES 14 AND 15.

(CONTINUED AT RIGHT)

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
2" X 2"	35	12
2" X 4"	161	108
2" X 6"	162	162
NAILS	NO. REQD	POUNDS
10d (3")	194	3

LOAD AS SHOWN

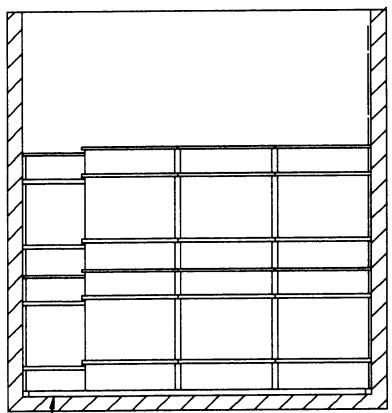
<u>ITEM</u>	<u>QUANTITY</u>	<u>WEIGHT (APPROX)</u>
55-GALLON DRUM	189	28,350 LBS
DUNNAGE	---	567 LBS
TOTAL WEIGHT		28,917 LBS (APPROX)



ISOMETRIC VIEW

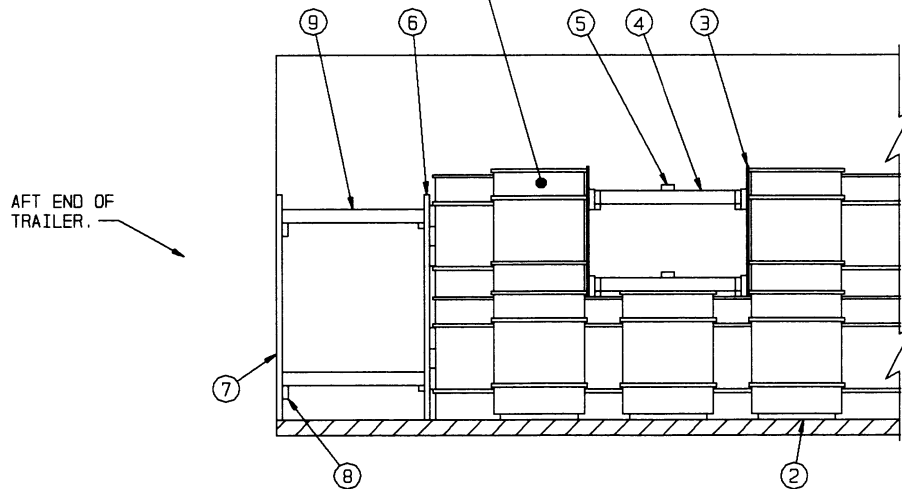
KEY NUMBERS

- ① FORWARD GATE ASSEMBLY A (1 REQD). SEE THE DETAIL ON PAGE 32. SEE GENERAL NOTE "O" ON PAGE 2.
- ② RISER ASSEMBLY A (9 REQD). SEE THE DETAIL ON PAGE 34. SEE SPECIAL NOTE 11 ON PAGE 7.
- ③ PARTIAL LAYER GATE ASSEMBLY A (2 REQD, ONE RIGHT HAND AND ONE LEFT HAND). SEE THE DETAIL ON PAGE 35. SEE SPECIAL NOTE 5 ON PAGE 7.
- ④ STRUT, 2" X 4" BY CUT-TO-FIT (6 REQD). NAIL TO PARTIAL LAYER GATE W/2-10d NAILS AT EACH END. SEE SPECIAL NOTE 5 ON PAGE 7.
- ⑤ STRUT BRACING, 2" X 4" BY TRAILER WIDTH MINUS 1/2" (2 REQD). NAIL TO THE STRUTS W/2-12d NAILS AT EACH JOINT.
- ⑥ REAR GATE ASSEMBLY A (1 REQD). SEE THE DETAIL ON PAGE 33.
- ⑦ STRUT BEARING PIECE, 2" X 4" X 63" (3 REQD). POSITION IN LINE WITH THE STRUT BEARING PIECES ON REAR GATE ASSEMBLY A.
- ⑧ STRUT LEDGER, 2" X 4" BY TRAILER WIDTH MINUS 1/2" (2 REQD). POSITION AS SHOWN AND NAIL TO PIECES MARKED ⑦ W/3-10d NAILS AT EACH JOINT.
- ⑨ STRUT, 2" X 4" BY CUT-TO-FIT (6 REQD). POSITION AS SHOWN AND TOENAIL TO STRUT BEARING PIECES AND REAR GATE W/2-12d NAILS AT EACH END. SEE SPECIAL NOTES 3 AND 6 ON PAGE 7.



SECTION B-B

MXU-650/B AIRFOIL GROUPS IN 55-GALLON METAL DRUMS.
SEE GENERAL NOTES "C" AND "R" ON PAGE 2.



PARTIAL ELEVATION VIEW

SPECIAL NOTES:

1. A LESS-THAN-TRAILER LOAD OF 105 MXU-650/B AIRFOIL GROUP IN 55-GALLON METAL DRUMS IS SHOWN IN A 7'-6" WIDE (INSIDE DIMENSION) BY 40'-0" LONG CONVENTIONAL VAN TRAILER.
2. A WIDER OR NARROWER TRAILER CAN BE USED FOR SHIPPING THE DEPICTED LOAD BY ADJUSTING THE WIDTH AND/OR LENGTH OF PIECES MARKED ① , ② , ③ , ⑤ , ⑥ , AND ⑧ .
3. IF THE SPACE BETWEEN THE REAR OF THE LOAD AND THE TRAILER DOORS, WHEN CLOSED, IS 12" OR LESS, USE REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 4.
4. AN "OMITTED DRUM ASSEMBLY" AS SHOWN IN THE LOAD ON PAGE 14 MAY BE USED IN THE TOP LAYER OF THE LOAD AS REQUIRED. SEE THE "OMITTED DRUM ASSEMBLY" ON PAGE 39 AND SPECIAL NOTE 3 ON PAGE 14.
5. THE "PARTIAL LAYER GATE ASSEMBLY A", SHOWN AS PIECE MARKED ③ , AND THE "STRUTS", SHOWN AS PIECE MARKED ④ , MAY BE USED WHEN OMITTING THREE OR NINE METAL DRUMS FROM THE SECOND OR THIRD LAYER OF A LOAD. POSITION THE GATE ASSEMBLIES AGAINST THE STACKS OF METAL DRUMS WHICH ARE POSITIONED ON THE RISER ASSEMBLIES, AS SHOWN.
6. IF THE STRUTS SHOWN AS PIECES MARKED ⑨ ARE LONGER THAN 8'-0" SEE THE "STRUT BRACING DETAIL" ON PAGE 40.
7. THE PROCEDURES SHOWN ON PAGE 6 MAY BE USED IN TRAILERS HAVING NAILABLE OR NON-NAILABLE FLOORS.
8. TO SATISFY THE QUANTITY OF METAL DRUMS TO BE SHIPPED THE SECOND LAYER MAY BE OMITTED FROM THE LOAD ON PAGE 6. SEE THE "FORWARD GATE ASSEMBLY A" ON PAGE 32 AND THE "REAR GATE ASSEMBLY A" ON PAGE 33 FOR "ONE LAYER LOAD" GATE ASSEMBLIES. ALSO REDUCE THE HEIGHT OF PIECES MARKED ⑦ FROM 63" TO 30". SIX STRUTS SHOWN AS PIECES MARKED ⑨ ARE REQUIRED IN A ONE LAYER LOAD.
9. IF THE SPACE BETWEEN THE REAR OF THE ONE LAYER LOAD AND THE TRAILER DOORS, WHEN CLOSED, IS GREATER THAN 8'-0", USE THE "K-BRACE" METHOD OF REAR BLOCKING, AS SHOWN IN THE LOAD ON PAGE 8, IN LIEU OF PIECES MARKED ⑤ , ⑦ , ⑧ , AND ⑨ , IN THE LOAD ON PAGE 6.

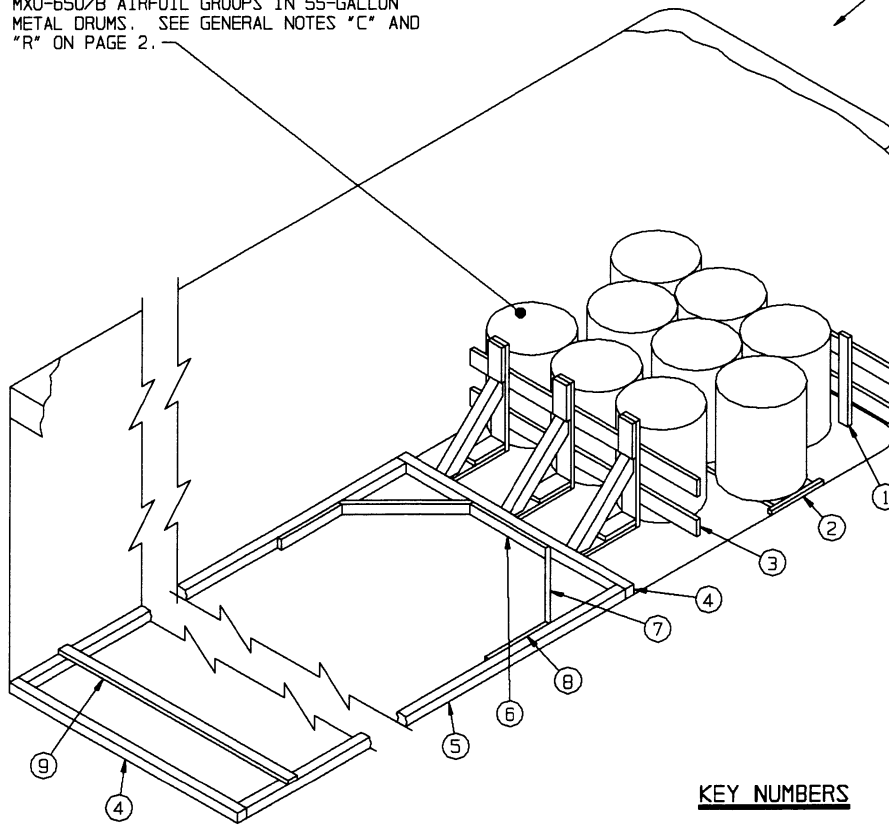
(SPECIAL NOTES CONTINUED)

10. ONE HUNDRED AND FIVE (105) METAL DRUMS ARE SHOWN AS A TYPICAL LOAD QUANTITY. THE ACTUAL NUMBER OF METAL DRUMS MAY BE MORE-OR-LESS DEPENDING ON THE QUANTITY TO BE SHIPPED. ADJUST THE DUNNAGE ASSEMBLIES AND OTHER BLOCKING AND BRACING MATERIAL AS NECESSARY.
11. IF DESIRED, THE "ALTERNATIVE RISER ASSEMBLY" SHOWN ON PAGE 34 MAY BE USED IN LIEU OF THE "RISER ASSEMBLY A" SHOWN IN THE LOAD ON PAGE 6.
12. IF THE TRAILER BEING OUTLOADED CONTAINS MECHANICAL BRACING DEVICES, AS DESCRIBED IN GENERAL NOTE "G" ON PAGE 2, SEE THE LOADS SHOWN ON PAGES 12 THROUGH 15.
13. WHEN LOADING THE TRAILER, POSITION THE FIRST THREE BOTTOM DRUMS AT THE FORWARD END AGAINST THE FORWARD GATE ASSEMBLY A. EQUAL SPACE MUST BE MAINTAINED BETWEEN DRUMS DEPENDING ON THE INSIDE WIDTH OF THE TRAILER. NEXT POSITION THE BOTTOM THREE DRUMS IN THE SECOND ROW TO NEST BETWEEN THE FIRST THREE DRUMS. MAKE ADJUSTMENTS TO THE SPACE BETWEEN THE FIRST SIX DRUMS AS NECESSARY TO FORM THE CONFIGURATION SHOWN IN THE "PARTIAL PLAN VIEW" ON PAGE 5. PROCEED WITH THE REMAINDER OF THE LOAD.

(CONTINUED AT RIGHT)

MXU-650/B AIRFOIL GROUPS IN 55-GALLON METAL DRUMS. SEE GENERAL NOTES "C" AND "R" ON PAGE 2.

FORWARD END OF TRAILER.



ISOMETRIC VIEW

KEY NUMBERS

- ① FORWARD GATE ASSEMBLY A (1 REQD). SEE THE DETAIL ON PAGE 32.
- ② RISER ASSEMBLY A (1 REQD). SEE THE DETAIL ON PAGE 34. SEE SPECIAL NOTE 7 AT LEFT AND GENERAL NOTE "O" ON PAGE 2.
- ③ KNEE BRACE ASSEMBLY A (1 REQD). SEE THE DETAIL ON PAGE 36. SEE SPECIAL NOTE 3 AT LEFT.
- ④ HEADER, 4" X 4" BY TRAILER WIDTH MINUS 1/2" (2 REQD). TOENAIL FORWARD HEADER TO KNEE BRACES MARKED ③ W/2-12d NAILS EACH. SEE SPECIAL NOTE 3 AT LEFT.
- ⑤ SIDE STRUT, 4" X 4" BY CUT-TO-FIT (2 REQD). TOENAIL TO THE HEADERS W/2-12d NAILS AT EACH END.
- ⑥ CENTER CLEAT, 2" X 4" X 30" (1 REQD). CENTER ON AND NAIL TO THE FORWARD HEADER W/7-12d NAILS.
- ⑦ DIAGONAL BRACE, 2" X 4" BY CUT-TO-FIT (2 REQD). DOUBLE BEVEL EACH END WITH 45° CUTS. INSTALL AT A 45° ANGLE AND TOENAIL TO THE HEADER AND SIDE STRUT W/2-16d NAILS AT EACH END.
- ⑧ BACK-UP CLEAT, 2" X 4" X 24" (2 REQD). POSITION AGAINST END OF DIAGONAL BRACE AND NAIL TO THE SIDE STRUT W/6-12d NAILS.
- ⑨ STRUT BRACING, 2" X 4" BY TRAILER WIDTH (CUT-TO-FIT) (MINIMUM OF ONE REQUIRED). INSTALL ONE (1) NEAR THE ENDS OF THE SIDE STRUTS AS SHOWN. ONE (1) ADDITIONAL PIECE IS REQUIRED FOR EVERY 7'-0" OF STRUT LENGTH. NAIL TO SIDE STRUTS W/3-10d NAILS AT EACH END.

(SPECIAL NOTES CONTINUED)

- B. WHEN LOADING THE TRAILER POSITION THE FIRST THREE BOTTOM DRUMS AT THE FORWARD END AGAINST THE FORWARD GATE ASSEMBLY A. EQUAL SPACE MUST BE MAINTAINED BETWEEN DRUMS DEPENDING ON THE INSIDE WIDTH OF THE TRAILER. NEXT POSITION THE THREE DRUMS IN THE SECOND ROW TO NEST BETWEEN THE FIRST THREE DRUMS. MAKE ADJUSTMENTS TO THE SPACE BETWEEN THE FIRST SIX DRUMS AS NECESSARY TO FORM THE CONFIGURATION SHOWN IN THE "PARTIAL PLAN VIEW" ON PAGE 5. PROCEED WITH THE REMAINDER OF THE LOAD.

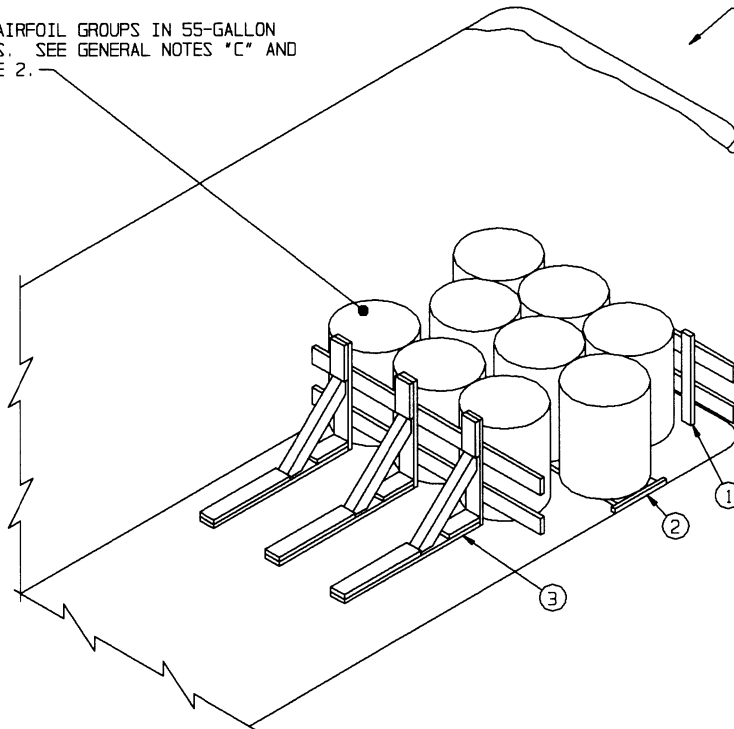
SPECIAL NOTES:

- 1. A LESS-THAN-TRAILER LOAD OF 9 MXU-650/B AIRFOIL GROUPS IN 55-GALLON METAL DRUMS IS SHOWN IN A 7'-6" WIDE (INSIDE DIMENSION) CONVENTIONAL VAN TRAILER HAVING A NON-NAILABLE FLOOR.
- 2. A WIDER OR NARROWER TRAILER CAN BE USED FOR SHIPPING THE DEPICTED LOAD BY ADJUSTING THE WIDTH AND/OR LENGTH OF PIECES MARKED ①, ②, ③, ④, AND ⑨.
- 3. THE PROCEDURES SHOWN ABOVE DEPICT THE USE OF A "K-BRACE" METHOD AND A "KNEE-BRACE" METHOD OF BLOCKING IN A TRAILER EQUIPPED WITH A NON-NAILABLE FLOOR. THE METHOD SHOWN IS ADEQUATE FOR RETAINING A ONE LAYER LOAD OF 3 THROUGH 57 METAL DRUMS (8,550 POUNDS). NOTE: WHEN FABRICATING THE "KNEE-BRACE" ASSEMBLY OMIT THE 2" X 6" X 30" BACK-UP CLEAT AND REDUCE THE LENGTH OF THE FLOOR CLEAT FROM 53" TO 23". IF THE TRAILER IS EQUIPPED WITH A NAILABLE FLOOR SEE THE PROCEDURES SHOWN IN THE LTL LOAD ON PAGE 9. HOWEVER, THE PROCEDURES SHOWN ON THIS PAGE MAY ALSO BE USED IN TRAILERS HAVING A NAILABLE FLOOR.
- 4. NINE (9) METAL DRUMS ARE SHOWN AS A TYPICAL LOAD QUANTITY. THE ACTUAL NUMBER OF METAL DRUMS MAY BE MORE-OR-LESS DEPENDING ON THE QUANTITY TO BE SHIPPED. ADJUST THE DUNNAGE ASSEMBLIES AND OTHER BLOCKING AND BRACING MATERIAL AS NECESSARY.
- 5. ONE OR MORE "OMITTED DRUM ASSEMBLIES" AS SHOWN IN THE LOAD ON PAGE 14, MAY BE USED AS REQUIRED, TO HELP ADJUST THE LOAD QUANTITY. SEE THE "OMITTED DRUM ASSEMBLY" ON PAGE 39 AND SPECIAL NOTE 3 ON PAGE 14.
- 6. IF THE TRAILER BEING OUTLOADED CONTAINS MECHANICAL BRACING DEVICES, AS DESCRIBED IN GENERAL NOTE "G" ON PAGE 2, SEE THE LOADS SHOWN ON PAGES 12 THROUGH 15.
- 7. IF DESIRED THE "ALTERNATIVE RISER ASSEMBLY" SHOWN ON PAGE 34 MAY BE USED IN LIEU OF THE "RISER ASSEMBLY A" SHOWN IN THE LOAD ON THIS PAGE.

(CONTINUED AT RIGHT)

MXU-650/B AIRFOIL GROUPS IN 55-GALLON METAL DRUMS. SEE GENERAL NOTES "C" AND "R" ON PAGE 2.

FORWARD END OF TRAILER.



ISOMETRIC VIEW

KEY NUMBERS

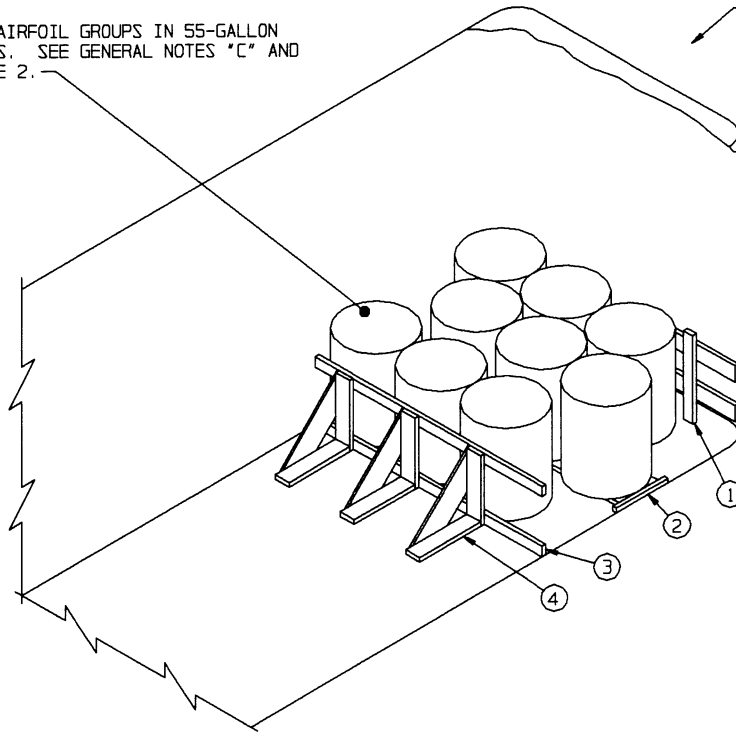
SPECIAL NOTES:

1. A LESS-THAN-TRAILER LOAD OF 9 MXU-650/B AIRFOIL GROUPS IN 55-GALLON METAL DRUMS IS SHOWN IN A 7'-6" WIDE (INSIDE DIMENSION) CONVENTIONAL VAN TRAILER HAVING A NAILABLE FLOOR.
2. A WIDER OR NARROWER TRAILER CAN BE USED FOR SHIPPING THE DEPICTED LOAD BY ADJUSTING THE WIDTH AND/OR LENGTH OF PIECES MARKED ①, ②, AND ③.
3. THE PROCEDURES SHOWN ABOVE DEPICT THE USE OF A "KNEE-BRACE" METHOD OF BLOCKING IN A TRAILER EQUIPPED WITH A NAILABLE FLOOR. THE "KNEE-BRACE ASSEMBLY A", SHOWN AS PIECE MARKED ③, IS ADEQUATE FOR RETAINING A ONE LAYER LOAD OF 3 THROUGH 63 METAL DRUMS (9,450 POUNDS). IF THE TRAILER IS EQUIPPED WITH A NON-NAILABLE FLOOR, USE THE PROCEDURES SHOWN IN THE LTL LOAD ON PAGE 8.
4. NINE (9) METAL DRUMS ARE SHOWN AS A TYPICAL LOAD QUANTITY. THE ACTUAL NUMBER OF METAL DRUMS MAY BE MORE-OR-LESS DEPENDING ON THE QUANTITY TO BE SHIPPED. ADJUST THE DUNNAGE ASSEMBLIES AND OTHER BLOCKING AND BRACING MATERIAL AS NECESSARY.
5. ONE OR MORE "OMITTED DRUM ASSEMBLIES" AS SHOWN IN THE LOAD ON PAGE 14, MAY BE USED AS REQUIRED, TO HELP ADJUST THE LOAD QUANTITY. SEE THE "OMITTED DRUM ASSEMBLY" ON PAGE 39 AND SPECIAL NOTE 3 ON PAGE 14.
6. FOR AN ALTERNATIVE METHOD OF BLOCKING A ONE LAYER LOAD OF 3 THROUGH 39 DRUMS (5,850 POUNDS), IN A TRAILER HAVING A NAILABLE FLOOR, SEE THE PROCEDURES SHOWN ON PAGE 10.
7. IF THE TRAILER BEING OUTLOADED CONTAINS MECHANICAL BRACING DEVICES, AS DESCRIBED IN GENERAL NOTE "G" ON PAGE 2, SEE THE LOADS SHOWN ON PAGES 12 THROUGH 15.
8. IF DESIRED, THE "ALTERNATIVE RISER ASSEMBLY" SHOWN ON PAGE 34 MAY BE USED IN LIEU OF THE "RISER ASSEMBLY A" SHOWN IN THE LOAD ON THIS PAGE.
9. WHEN LOADING THE TRAILER POSITION THE FIRST THREE DRUMS AT THE FORWARD END AGAINST THE FORWARD GATE ASSEMBLY A. EQUAL SPACE MUST BE MAINTAINED BETWEEN DRUMS DEPENDING ON THE INSIDE WIDTH OF THE TRAILER. NEXT POSITION THE THREE DRUMS IN THE SECOND ROW TO NEST BETWEEN THE FIRST THREE DRUMS. MAKE ADJUSTMENTS TO THE SPACE BETWEEN THE FIRST SIX DRUMS AS NECESSARY TO FORM THE CONFIGURATION SHOWN IN THE "PARTIAL PLAN VIEW" ON PAGE 5. PROCEED WITH THE REMAINDER OF THE LOAD.

- ① FORWARD GATE ASSEMBLY A (1 REQD). SEE THE DETAIL ON PAGE 32 AND GENERAL NOTE "O" ON PAGE 2.
- ② RISER ASSEMBLY A (1 REQD). SEE THE DETAIL ON PAGE 34. SEE SPECIAL NOTE 8 AT LEFT.
- ③ KNEE BRACE ASSEMBLY A (1 REQD). NAIL TO THE TRAILER FLOOR W/12-12d NAILS. SEE THE DETAIL ON PAGE 36. SEE SPECIAL NOTE 3 AT LEFT.

MXU-650/B AIRFOIL GROUPS IN 55-GALLON METAL DRUMS. SEE GENERAL NOTES "C" AND "R" ON PAGE 2.

FORWARD END OF TRAILER.



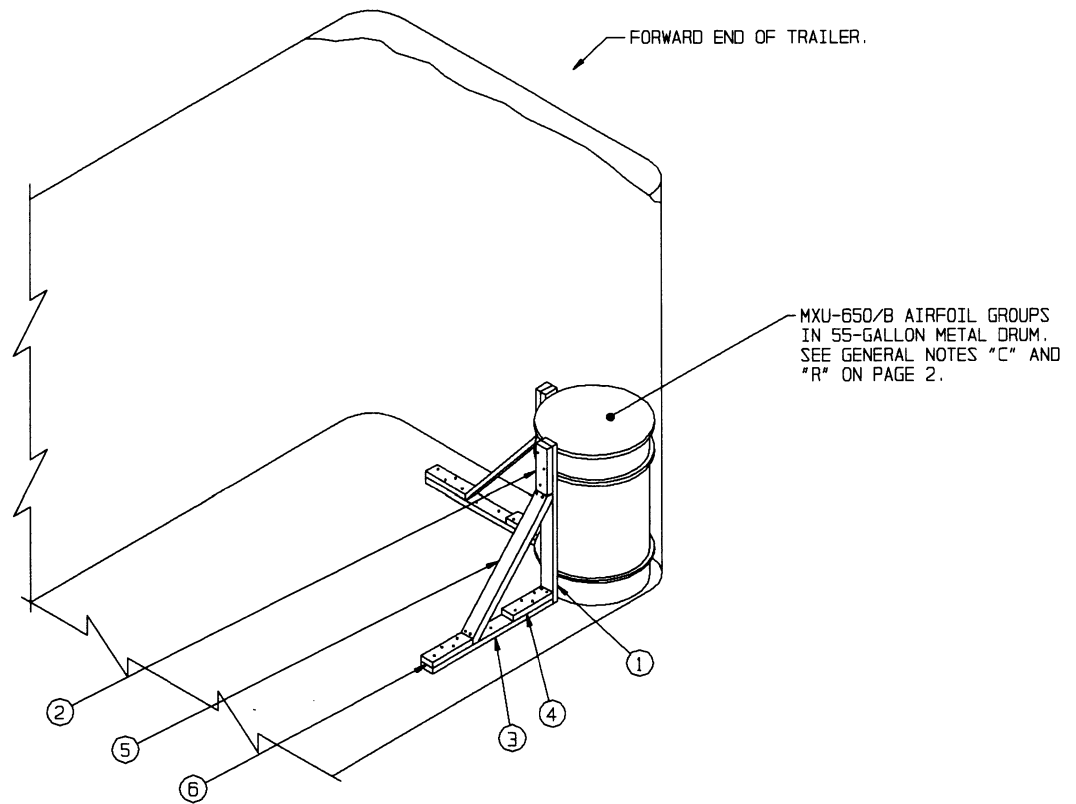
ISOMETRIC VIEW

SPECIAL NOTES:

1. A LESS-THAN-TRAILER LOAD OF 9 MXU-650/B AIRFOIL GROUPS IN 55-GALLON METAL DRUMS IS SHOWN IN A 7'-6" WIDE (INSIDE DIMENSION) CONVENTIONAL VAN TRAILER HAVING A NAILABLE FLOOR.
2. A WIDER OR NARROWER TRAILER CAN BE USE FOR SHIPPING THE DEPICTED LOAD BY ADJUSTING THE WIDTH AND/OR LENGTH OF PIECES MARKED ①, ②, AND ③.
3. THE PROCEDURES SHOWN ABOVE DEPICT THE USE OF A "LTL BRACE" METHOD OF BLOCKING IN A TRAILER EQUIPPED WITH A NAILABLE FLOOR. EACH LTL BRACE AS APPLIED FOR LONGITUDINAL BRACING WILL RETAIN 2,000 POUNDS. THE THREE LTL BRACES SHOWN IN THE LOAD ON THIS PAGE ARE ADEQUATE FOR RETAINING A ONE LAYER LOAD OF 3 THROUGH 39 METAL DRUMS (5,850 POUNDS) IN A TRAILER EQUIPPED WITH A NAILABLE FLOOR.
4. NINE (9) METAL DRUMS ARE SHOWN AS A TYPICAL LOAD QUANTITY. THE ACTUAL NUMBER OF METAL DRUMS MAY BE MORE-OR-LESS DEPENDING ON THE QUANTITY TO BE SHIPPED. ADJUST THE DUNNAGE ASSEMBLIES AND OTHER BLOCKING AND BRACING MATERIAL AS NECESSARY.
5. ONE OR MORE "OMITTED DRUM ASSEMBLIES" AS SHOWN IN THE LOAD ON PAGE 14 MAY BE USED AS REQUIRED, TO HELP ADJUST THE LOAD QUANTITY. SEE THE "OMITTED DRUM ASSEMBLY" ON PAGE 39 AND SPECIAL NOTE 3 ON PAGE 14.
6. IF THE TRAILER BEING OUTLOADED CONTAINS MECHANICAL BRACING DEVICES, AS DESCRIBED IN GENERAL NOTE "G" ON PAGE 2. SEE THE LOADS SHOWN ON PAGES 12 THROUGH 15.
7. IF DESIRED, THE "ALTERNATIVE RISER ASSEMBLY" SHOWN ON PAGE 34 MAY BE USED IN LIEU OF THE "RISER ASSEMBLY A" SHOWN IN THE LOAD ON THIS PAGE.
8. WHEN LOADING THE TRAILER POSITION THE FIRST THREE DRUMS AT THE FORWARD END AGAINST THE FORWARD GATE ASSEMBLY A. EQUAL SPACE MUST BE MAINTAINED BETWEEN DRUMS DEPENDING ON THE INSIDE WIDTH OF THE TRAILER. NEXT POSITION THE THREE DRUMS IN THE SECOND ROW TO NEST BETWEEN THE FIRST THREE DRUMS. MAKE ADJUSTMENTS TO THE SPACE BETWEEN THE FIRST SIX DRUMS AS NECESSARY TO FORM THE CONFIGURATION SHOWN IN THE "PARTIAL PLAN VIEW" ON PAGE 5. PROCEED WITH THE REMAINDER OF THE LOAD.

KEY NUMBERS

- ① FORWARD GATE ASSEMBLY A (1 REQD). SEE THE DETAIL ON PAGE 32. SEE GENERAL NOTE "O" ON PAGE 2.
- ② RISER ASSEMBLY A (1 REQD). SEE THE DETAIL ON PAGE 34. SEE SPECIAL NOTE 7 AT LEFT.
- ③ LOAD BEARING PIECE, 2" X 4" BY TRAILER WIDTH MINUS 1/2" (2 REQD). POSITION ONE AT BOTTOM AND ONE AT TOP OF LTL BRACE. NAIL TO THE LTL BRACE W/3-10d NAILS AT EACH JOINT.
- ④ LTL BRACE (3 REQD). POSITION WITH THE ANGLE BRACE IN LINE WITH CENTER OF 55-GALLON DRUM. NAIL TO THE TRAILER FLOOR W/10-12d NAILS. SEE SPECIAL NOTE 3 AT LEFT AND GENERAL NOTE "O" ON PAGE 2.



ISOMETRIC VIEW

KEY NUMBERS

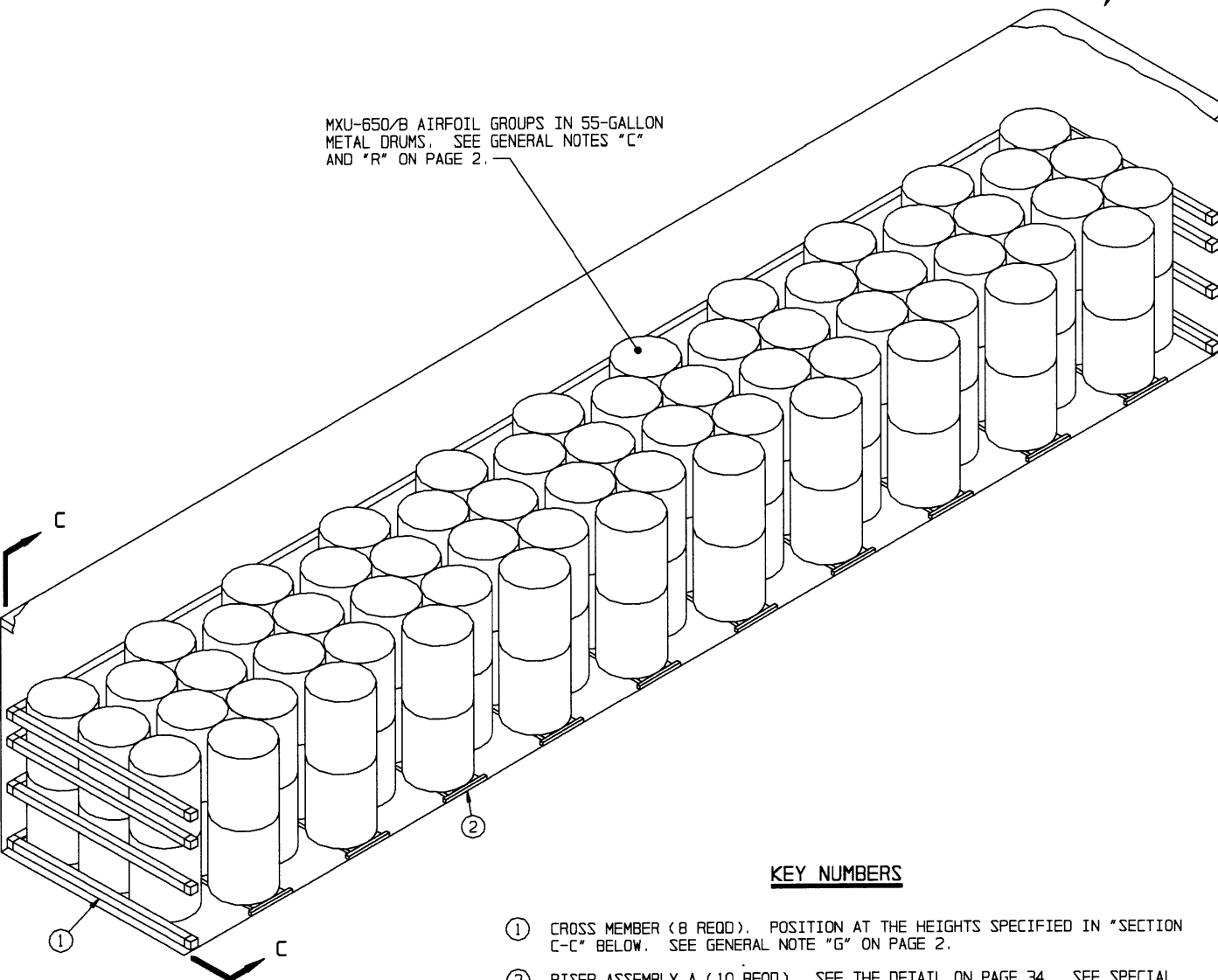
SPECIAL NOTES:

1. A LESS-THAN-TRAILER LOAD OF MXU-650/B AIRFOIL GROUPS IN 55-GALLON METAL DRUM IS SHOWN IN A 7'-6" WIDE (INSIDE DIMENSION) CONVENTIONAL VAN TRAILER HAVING A NAILABLE FLOOR.
2. EACH KNEE BRACE ASSEMBLY WILL RETAIN A LOAD OF 2,000 POUNDS.
3. THE METHOD SHOWN ABOVE MAY BE USED FOR MORE THAN ONE 55-GALLON METAL DRUM IN THE SAME VEHICLE.
4. CENTER THE KNEE BRACE ON THE 55-GALLON METAL DRUM.
5. IF THE TRAILER BEING OUTLOADED CONTAINS MECHANICAL BRACING DEVICES, AS DESCRIBED IN GENERAL NOTE "G" ON PAGE 2, SEE THE LOADS SHOWN ON PAGES 12 THROUGH 15.
6. THE MATERIAL AS LISTED IN THE KEY NUMBERS ON THIS PAGE IS FOR CONSTRUCTION OF ONE (1) KNEE BRACE. FOR THE LOAD AS SHOWN, THE CONSTRUCTION OF TWO (2) KNEE BRACES WILL BE REQUIRED.

- ① VERTICAL PIECE, 2" X 4" X 36" (1 REQD).
- ② HOLD DOWN CLEAT, 2" X 4" X 12" (1 REQD). NAIL TO THE VERTICAL PIECES W/3-10d NAILS. SEE GENERAL NOTE "O" ON PAGE 2.
- ③ HORIZONTAL BRACE, 2" X 4" X 36" (1 REQD). NAIL TO THE FLOOR W/6-12d NAILS.
- ④ SUPPORT CLEAT, 2" X 4" X 12" (1 REQD). NAIL TO THE HORIZONTAL BRACE W/3-12d NAILS. TOENAIL TO THE VERTICAL PIECE W/2-12d NAILS.
- ⑤ DIAGONAL BRACE, 2" X 4" X 32" (1 REQD). DOUBLE BEVEL EACH END WITH 45° ANGLE AS SHOWN AND TOENAIL TO THE VERTICAL PIECE W/2-12d NAILS AT EACH END.
- ⑥ BACK-UP CLEAT, 2" X 4" X 12" (1 REQD). POSITION AGAINST THE DIAGONAL BRACE AND NAIL TO THE HORIZONTAL BRACE W/4-12d NAILS.

FORWARD END OF TRAILER. →

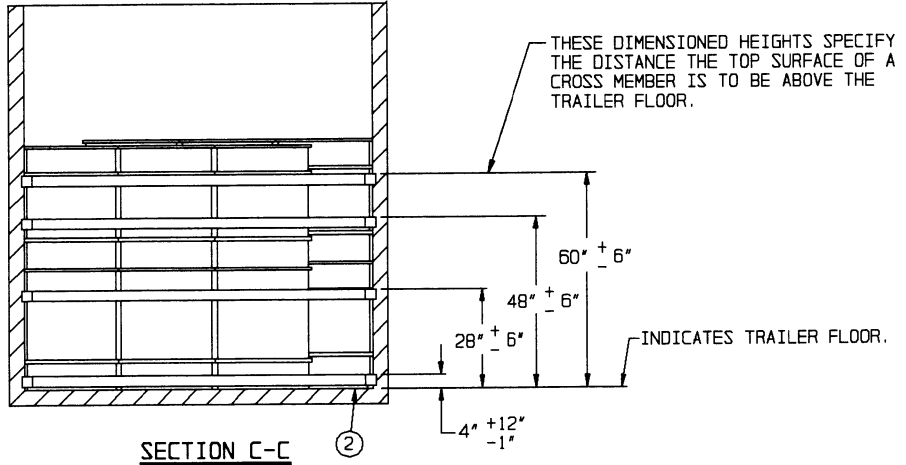
MXU-650/B AIRFOIL GROUPS IN 55-GALLON METAL DRUMS. SEE GENERAL NOTES "C" AND "R" ON PAGE 2.



KEY NUMBERS

- ① CROSS MEMBER (8 REQD). POSITION AT THE HEIGHTS SPECIFIED IN "SECTION C-C" BELOW. SEE GENERAL NOTE "G" ON PAGE 2.
- ② RISER ASSEMBLY A (10 REQD). SEE THE DETAIL ON PAGE 34. SEE SPECIAL NOTE 7 ON PAGE 13.

ISOMETRIC VIEW



SECTION C-C

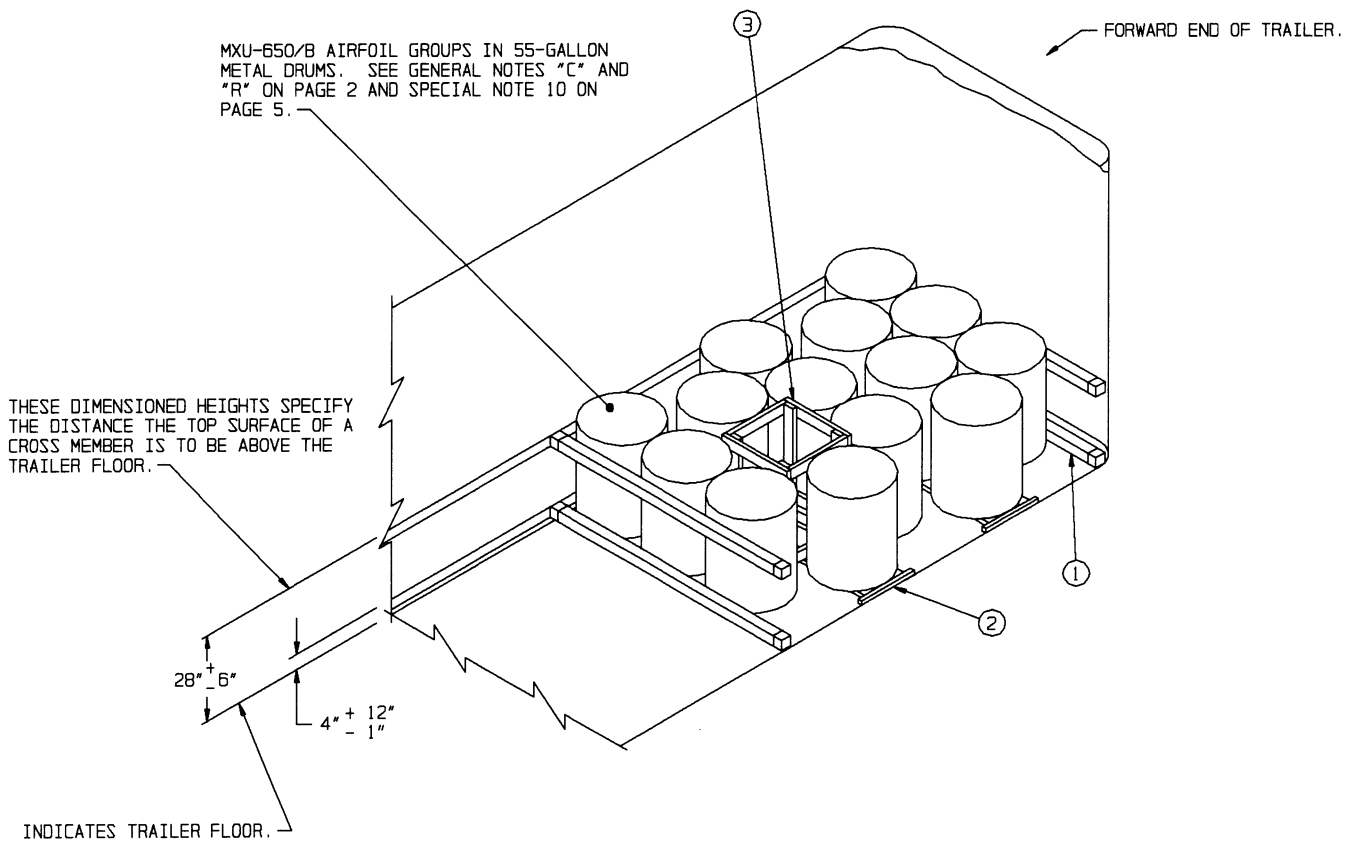
SPECIAL NOTES:

1. A LOAD OF 126 MXU-650/B AIRFOIL GROUPS IN 55-GALLON METAL DRUMS IS SHOWN IN A 7'-6" WIDE (INSIDE DIMENSION) BY 40'-0" LONG VAN TRAILER EQUIPPED WITH A MECHANICAL LOAD BLOCKING SYSTEM THAT CONTAINS AT LEAST EIGHT (8) CROSS MEMBERS AND IS AT LEAST 38'-0" IN LENGTH, AS MEASURED FROM THE FRONT WALL OF THE TRAILER.
2. A WIDER OR NARROWER TRAILER CAN BE USED FOR SHIPPING THE DEPICTED LOAD BY ADJUSTING THE WIDTH AND/OR LENGTH OF PIECE MARKED ② .
3. AN "OMITTED DRUM ASSEMBLY", AS SHOWN IN THE LOAD ON PAGE 14, MAY BE USED IN THE TOP LAYER AS REQUIRED. SEE THE "OMITTED DRUM ASSEMBLY" ON PAGE 39 AND SPECIAL NOTE 3 ON PAGE 14.
4. FOR METHODS OF BLOCKING LESS-THAN-TRAILER LOADS, SEE THE PROCEDURES ON PAGES 14 AND 15 AND SPECIAL NOTES 3 AND 5 ON THIS PAGE.
5. TO SATISFY THE QUANTITY OF METAL DRUMS TO BE SHIPPED THE SECOND LAYER MAY BE OMITTED FROM THE LOAD, OR THE LOAD MAY BE REDUCED BY OMITTING ONE OR MORE STACKS OF SIX METAL DRUMS EACH (3 WIDE AND 2 HIGH), OR THE LOAD MAY CONSIST OF A FULL BOTTOM LAYER AND A PARTIAL SECOND LAYER.
6. DO NOT LOAD THREE LAYERS HIGH IN A TRAILER HAVING MECHANICAL BRACING DEVICES. IF A THREE LAYER HIGH LOAD IS DESIRED A HIGH VOLUME CONVENTIONAL VAN TRAILER MUST BE USED. USE THE PROCEDURES SHOWN ON PAGES 4 AND 5.
7. IF DESIRED, THE "ALTERNATIVE RISER ASSEMBLY" SHOWN ON PAGE 34 MAY BE USED IN LIEU OF THE "RISER ASSEMBLY A" SHOWN IN THE LOAD ON PAGE 12.
8. WHEN LOADING THE TRAILER POSITION THE FIRST THREE BOTTOM DRUMS AT THE FORWARD END AGAINST THE CROSS MEMBERS. EQUAL SPACE MUST BE MAINTAINED BETWEEN DRUMS DEPENDING ON THE INSIDE WIDTH OF THE TRAILER. NEXT POSITION THE BOTTOM THREE DRUMS ON THE SECOND ROW TO NEST BETWEEN THE FIRST THREE DRUMS. MAKE ADJUSTMENTS TO THE SPACE BETWEEN THE FIRST SIX DRUMS AS NECESSARY TO FORM THE CONFIGURATION SHOWN IN THE "PARTIAL PLAN VIEW" ON PAGE 5. PROCEED WITH THE REMAINDER OF THE LOAD.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
2" X 2"	31	11
2" X 4"	145	97
NAILS	NO. REQD	POUNDS
10d (3")	80	1-1/4

LOAD AS SHOWN

<u>ITEM</u>	<u>QUANTITY</u>	<u>WEIGHT (APPROX)</u>
55-GALLON DRUM	126	18,900 LBS
DUNNAGE		218 LBS
<u>TOTAL WEIGHT</u>		<u>19,118 LBS (APPROX)</u>



ISOMETRIC VIEW

KEY NUMBERS

- ① CROSS MEMBER (4 REQD). POSITION AT THE HEIGHTS SPECIFIED. SEE GENERAL NOTE "G" ON PAGE 2.
- ② RISER ASSEMBLY A (2 REQD). SEE THE DETAIL ON PAGE 34. SEE SPECIAL NOTE 5 AT LEFT AND GENERAL NOTE "O" ON PAGE 2.
- ③ OMITTED DRUM ASSEMBLY (1 REQD). SEE THE DETAIL ON PAGE 39. SEE SPECIAL NOTE 3 AT LEFT.

SPECIAL NOTES:

1. A LESS-THAN-TRAILER LOAD OF 14 MXU-650/B AIRFOIL GROUPS IN 55-GALLON METAL DRUMS IS SHOWN IN A 7'-6" WIDE (INSIDE DIMENSION) VAN TRAILER EQUIPPED WITH A MECHANICAL LOAD BLOCKING SYSTEM.
2. A WIDER OR NARROWER TRAILER CAN BE USED FOR SHIPPING THE DEPICTED LOAD BY ADJUSTING THE WIDTH AND/OR LENGTH OF PIECES MARKED ②.
3. AN "OMITTED DRUM ASSEMBLY" MAY BE USED TO ADJUST LOAD QUANTITIES. MORE THAN ONE "OMITTED DRUM ASSEMBLY" MAY BE USED WITHIN A LOAD BUT THEY SHOULD BE POSITIONED AT LEAST ONE ROW APART, NEVER ADJACENT TO EACH OTHER. IN A TWO LAYER LOAD THE "OMITTED DRUM ASSEMBLY" SHOULD ALWAYS BE POSITIONED IN THE TOP LAYER, NEVER IN THE BOTTOM LAYER.
4. FOURTEEN (14) METAL DRUMS ARE SHOWN AS A TYPICAL LOAD QUANTITY. THE ACTUAL NUMBER OF METAL DRUMS MAY BE MORE-OR-LESS DEPENDING ON THE QUANTITY TO BE SHIPPED. ADJUST THE DUNNAGE ASSEMBLIES AND OTHER BLOCKING AND BRACING MATERIAL AS NECESSARY.
5. IF DESIRED, THE "ALTERNATIVE RISER ASSEMBLY" SHOWN ON PAGE 34 MAY BE USED IN LIEU OF THE "RISER ASSEMBLY A" SHOWN IN THE LOAD ON THIS PAGE.
6. WHEN LOADING THE TRAILER POSITION THE FIRST THREE DRUMS AT THE FORWARD END AGAINST THE CROSS MEMBERS. EQUAL SPACE MUST BE MAINTAINED BETWEEN DRUMS DEPENDING ON THE INSIDE WIDTH OF THE TRAILER. NEXT POSITION THE THREE DRUMS IN THE SECOND ROW TO NEST BETWEEN THE FIRST THREE DRUMS. MAKE ADJUSTMENTS TO THE SPACE BETWEEN THE FIRST SIX DRUMS AS NECESSARY TO FORM THE CONFIGURATION SHOWN IN THE "PARTIAL PLAN VIEW" ON PAGE 5. PROCEED WITH THE REMAINDER OF THE LOAD.

MXU-650/B AIRFOIL GROUPS IN 55-GALLON METAL DRUMS. SEE GENERAL NOTES "C" AND "R" ON PAGE 2 AND SPECIAL NOTE 10 ON PAGE 5.

FORWARD END OF TRAILER.

THESE DIMENSIONED HEIGHTS SPECIFY THE DISTANCE THE TOP SURFACE OF A CROSS MEMBER IS TO BE ABOVE THE TRAILER FLOOR.

$28'' \pm 6''$
 $4'' \pm 12'' - 1''$

INDICATES TRAILER FLOOR.

ISOMETRIC VIEW

KEY NUMBERS

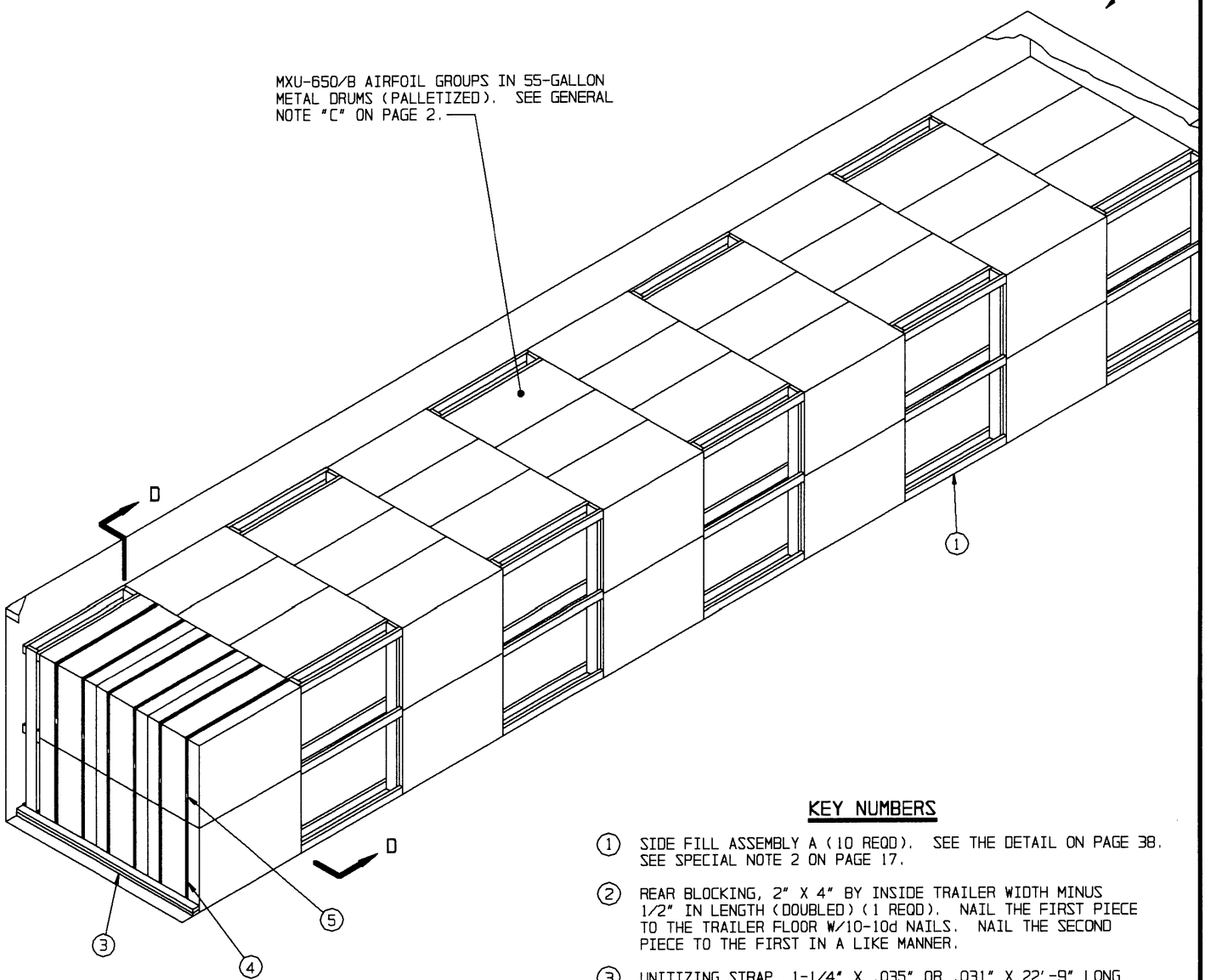
- ① CROSS MEMBER (4 REQD). POSITION AT THE HEIGHTS SPECIFIED. SEE GENERAL NOTE "G" ON PAGE 2.
- ② LATERAL SUPPORT PIECE, 2" X 4" BY CUT-TO-FIT (4 REQD). WIRE TIE TO THE CROSS MEMBER WITH NO. 14 GAGE WIRE AS SHOWN.
- ③ LOAD BEARING PIECE, 2" X 4" BY CUT-TO-FIT (2 REQD). NAIL TO PIECE MARKED ② W/2-10d NAILS AT EACH END.
- ④ WIRE, NO. 14 GAGE (AS REQD). WRAP AROUND PIECES MARKED ① AND ② AND TWIST ENDS TOGETHER.

SPECIAL NOTES:

1. A LESS-THAN-TRAILER LOAD OF 2 MXU-650/B AIRFOIL GROUPS IN 55-GALLON METAL DRUMS IS SHOWN IN A 7'-6" (INSIDE DIMENSION) VAN TRAILER EQUIPPED WITH A MECHANICAL LOAD BLOCKING SYSTEM.
2. A WIDER OR NARROWER TRAILER CAN BE USED FOR SHIPPING THE DEPICTED LOAD BY ADJUSTING THE LENGTH OF PIECES MARKED ②.
3. THE PROCEDURES SHOWN ABOVE MAY BE USED WHEN SHIPPING 1 THROUGH 3 METAL DRUMS OR AT THE REAR OF A ONE LAYER LOAD TO HELP ADJUST THE LOAD QUANTITY.

FORWARD END OF TRAILER. →

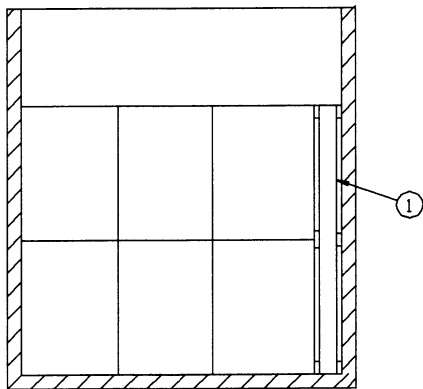
MXU-650/B AIRFOIL GROUPS IN 55-GALLON METAL DRUMS (PALLETIZED). SEE GENERAL NOTE "C" ON PAGE 2.



ISOMETRIC VIEW

KEY NUMBERS

- ① SIDE FILL ASSEMBLY A (10 REQD). SEE THE DETAIL ON PAGE 38. SEE SPECIAL NOTE 2 ON PAGE 17.
- ② REAR BLOCKING, 2" X 4" BY INSIDE TRAILER WIDTH MINUS 1/2" IN LENGTH (DOUBLED) (1 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/10-10d NAILS. NAIL THE SECOND PIECE TO THE FIRST IN A LIKE MANNER.
- ③ UNITIZING STRAP, 1-1/4" X .035" OR .031" X 22'-9" LONG STEEL STRAPPING (6 REQD). PRE-POSITION PRIOR TO LOADING THE LAST LOAD UNIT IN THE TRAILER.
- ④ SEAL FOR 1-1/4" STRAP (6 REQD, 1 PER STRAP). SEE GENERAL NOTE "Q" ON PAGE 2.



SECTION D-D

SPECIAL NOTES:

1. A LOAD OF 120 MXU-650/B AIRFOIL GROUPS IN 55-GALLON METAL DRUMS (PALLETIZED) IS SHOWN IN A 7'-6" WIDE (INSIDE DIMENSION) BY 45'-0" LONG CONVENTIONAL VAN TRAILER.
2. A WIDER OR NARROWER TRAILER CAN BE USED FOR SHIPPING THE DEPICTED LOAD BY ADJUSTING THE THICKNESS OF THE SIDE FILL ASSEMBLY, PIECE MARKED ① .
3. IF THE TRAILER BEING LOADED HAS ROUNDED CORNERS AT THE FORWARD END, THE SIDE FILL ASSEMBLY AT THE FORWARD END OF THE LOAD MAY BE ADJUSTED IN LENGTH AS NECESSARY.
4. TO SATISFY THE QUANTITY OF PALLET UNITS TO BE SHIPPED, THE ENTIRE SECOND LAYER MAY BE OMITTED FROM THE LOAD ON PAGE 16. OR, MULTIPLES OF 3 PALLET UNITS IN THE SECOND LAYER OR 6 PALLET UNITS FROM BOTH LAYERS MAY BE OMITTED. HOWEVER, THE LAST 2 LAYER LOAD UNIT MUST BE UNITIZED WITH PIECES MARKED ③ AND ④ AS SHOWN IN THE LOAD ON PAGE 16.

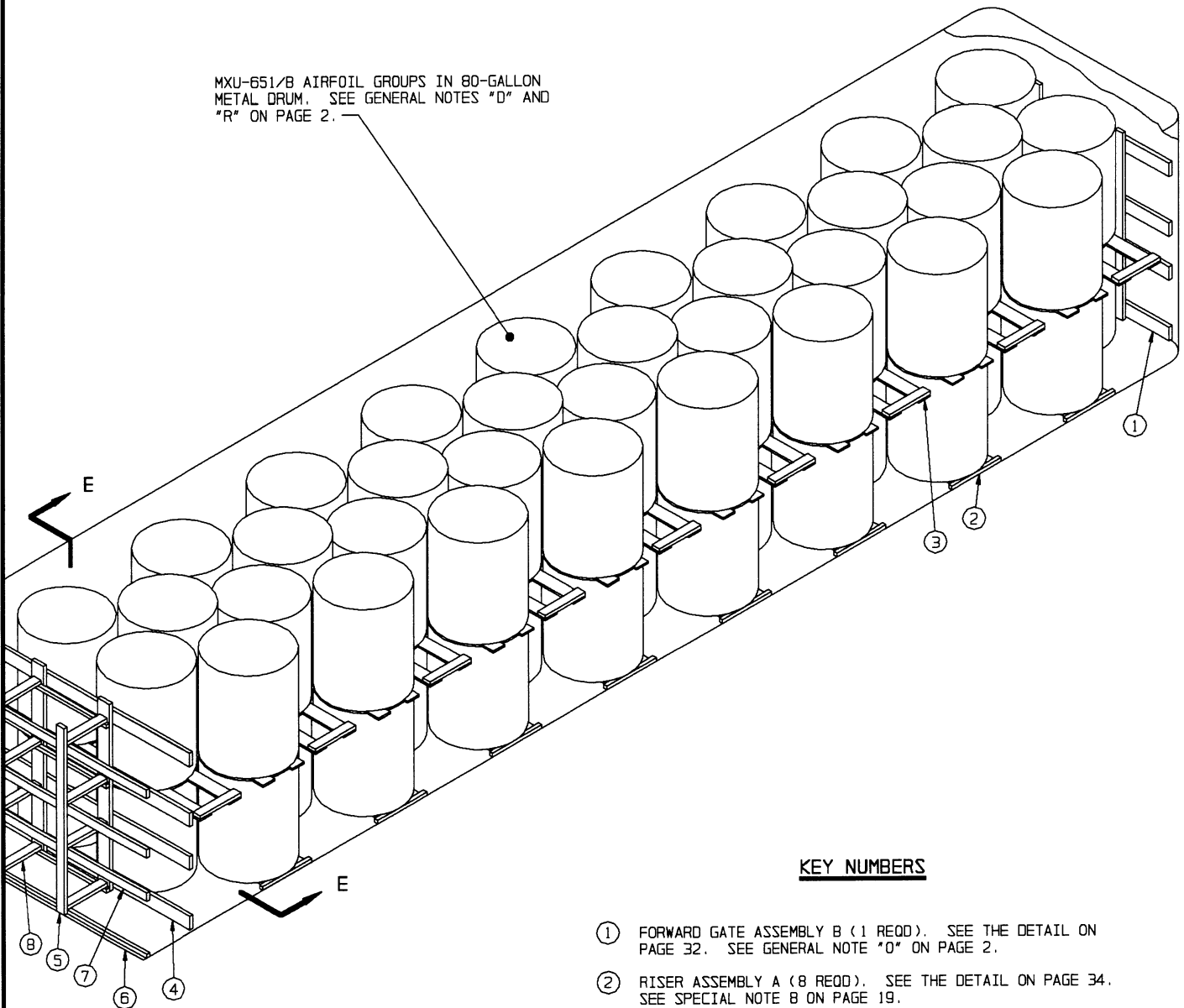
BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	232	155
2" X 6"	168	168
NAILS	NO. REQD	POUNDS
10d (3")	260	4
STEEL STRAPPING, 1-1/4" - 137' REQD - - - - 20 LBS		
SEAL FOR 1-1/4" STRAPPING - - 6 REQD - - - - - NIL		

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
55-GALLON DRUM (PALLETIZED)	120	23,580 LBS
DUNNAGE		670 LBS
<hr/>		<hr/>
TOTAL WEIGHT		24,250 LBS (APPROX)

FORWARD END OF TRAILER. ↗

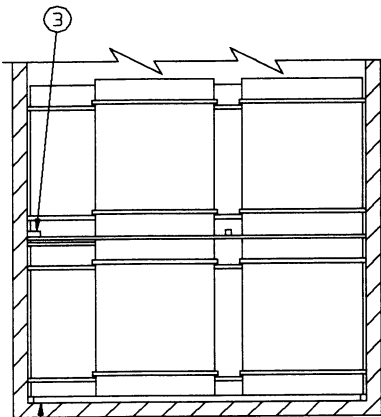
MXU-651/B AIRFOIL GROUPS IN 80-GALLON METAL DRUM. SEE GENERAL NOTES "D" AND "R" ON PAGE 2.



ISOMETRIC VIEW

KEY NUMBERS

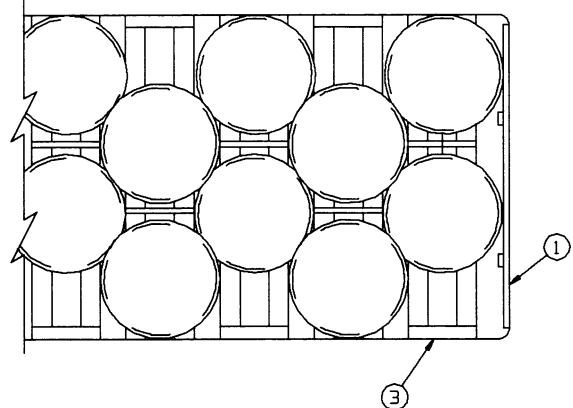
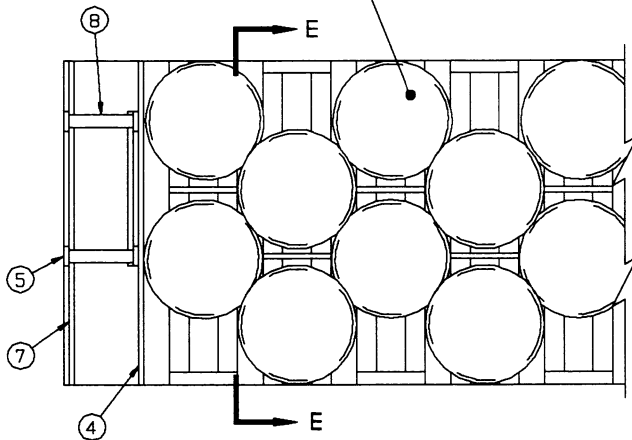
- ① FORWARD GATE ASSEMBLY B (1 REQD). SEE THE DETAIL ON PAGE 32. SEE GENERAL NOTE "O" ON PAGE 2.
- ② RISER ASSEMBLY A (8 REQD). SEE THE DETAIL ON PAGE 34. SEE SPECIAL NOTE B ON PAGE 19.
- ③ DECK ASSEMBLY (17 REQD). SEE THE DETAIL ON PAGE 34. SEE GENERAL NOTE "R" ON PAGE 2.
- ④ REAR GATE ASSEMBLY B (1 REQD). SEE THE DETAIL ON PAGE 33.
- ⑤ STRUT BEARING PIECE, 2" X 4" X 6'-4" (2 REQD). POSITION IN LINE WITH THE STRUT BEARING PIECES ON THE REAR GATE ASSEMBLY B.
- ⑥ STRUT LEDGER, 2" X 2" BY TRAILER WIDTH MINUS 1/2" (1 REQD). POSITION AS SHOWN AND NAIL TO PIECES MARKED ⑤ W/2-10d NAILS AT EACH JOINT.
- ⑦ STRUT LEDGER, 2" X 4" BY TRAILER WIDTH MINUS 1/2" (3 REQD). POSITION AS SHOWN AND NAIL TO PIECES MARKED ⑤ W/3-10d NAILS AT EACH JOINT.
- ⑧ STRUT, 2" X 4" BY CUT-TO-FIT (8 REQD). POSITION AS SHOWN AND NAIL TO THE STRUT BEARING PIECES AND REAR GATE W/2-12d NAILS AT EACH END. SEE SPECIAL NOTE 3 ON PAGE 19.



SECTION E-E

MXU-651/B AIRFOIL GROUPS IN 80-GALLON METAL DRUM. SEE GENERAL NOTES "D" AND "R" ON PAGE 2.

FORWARD END OF TRAILER.



PARTIAL PLAN VIEW

SPECIAL NOTES:

1. A LOAD OF 68 MXU-651/B AIRFOIL GROUPS IN 80-GALLON METAL DRUMS IS SHOWN IN A 7'-6" WIDE (INSIDE DIMENSION) BY 40'-0" LONG CONVENTIONAL VAN TRAILER.
2. A WIDER OR NARROWER TRAILER CAN BE USED FOR SHIPPING THE DEPICTED LOAD BY ADJUSTING THE WIDTH AND/OR LENGTH OF PIECES MARKED ①, ②, AND ③.
3. IF THE SPACE BETWEEN THE REAR OF THE LOAD AND THE TRAILER DOORS, WHEN CLOSED, IS 12" OR LESS, USE A SOLID FILL REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 4.
4. FOR METHODS OF BLOCKING LESS-THAN-TRAILER LOADS, SEE THE PROCEDURES ON PAGES 20 THROUGH 25 AND SPECIAL NOTE 6 ON THIS PAGE.
5. THE PROCEDURES SHOWN ON PAGE 18 MAY BE USED IN TRAILERS HAVING NAILABLE OR NON-NAILABLE FLOORS.
6. TO SATISFY THE QUANTITY OF METAL DRUMS TO BE SHIPPED THE SECOND LAYER MAY BE OMITTED FROM THE LOAD ON PAGE 18. SEE THE "FORWARD GATE ASSEMBLY B" ON PAGE 32 AND THE "REAR GATE ASSEMBLY B" ON PAGE 33 FOR "ONE LAYER LOAD" GATE ASSEMBLIES.
7. IF THE TRAILER BEING OUTLOADED CONTAINS MECHANICAL BRACING DEVICES, AS DESCRIBED IN GENERAL NOTE "G" ON PAGE 2, SEE THE LOADS SHOWN ON PAGES 26 THROUGH 29.

(CONTINUED AT RIGHT)

(SPECIAL NOTES CONTINUED)

8. IF DESIRED, THE "ALTERNATIVE RISER ASSEMBLY" SHOWN ON PAGE 34 MAY BE USED IN LIEU OF THE "RISER ASSEMBLY A" SHOWN IN THE LOAD ON PAGE 18.
9. IF THE STRUTS SHOWN AS PIECES MARKED ④ ARE LONGER THAN 8'-0", SEE THE "STRUT BRACING DETAIL" ON PAGE 40.
10. WHEN LOADING THE TRAILER, POSITION THE FIRST TWO BOTTOM DRUMS AT THE FORWARD END AGAINST THE FORWARD GATE ASSEMBLY B AS SHOWN IN THE "PARTIAL PLAN VIEW" ON THIS PAGE. NEXT POSITION THE BOTTOM TWO DRUMS IN THE SECOND ROW TO NEST AGAINST THE FIRST TWO DRUMS AND MAKE ADJUSTMENTS TO THE SPACE BETWEEN THE DRUMS AS NECESSARY TO FORM THE CONFIGURATION SHOWN IN THE "PARTIAL PLAN VIEW" ON THIS PAGE. PROCEED WITH THE REMAINDER OF THE LOAD.

BILL OF MATERIAL

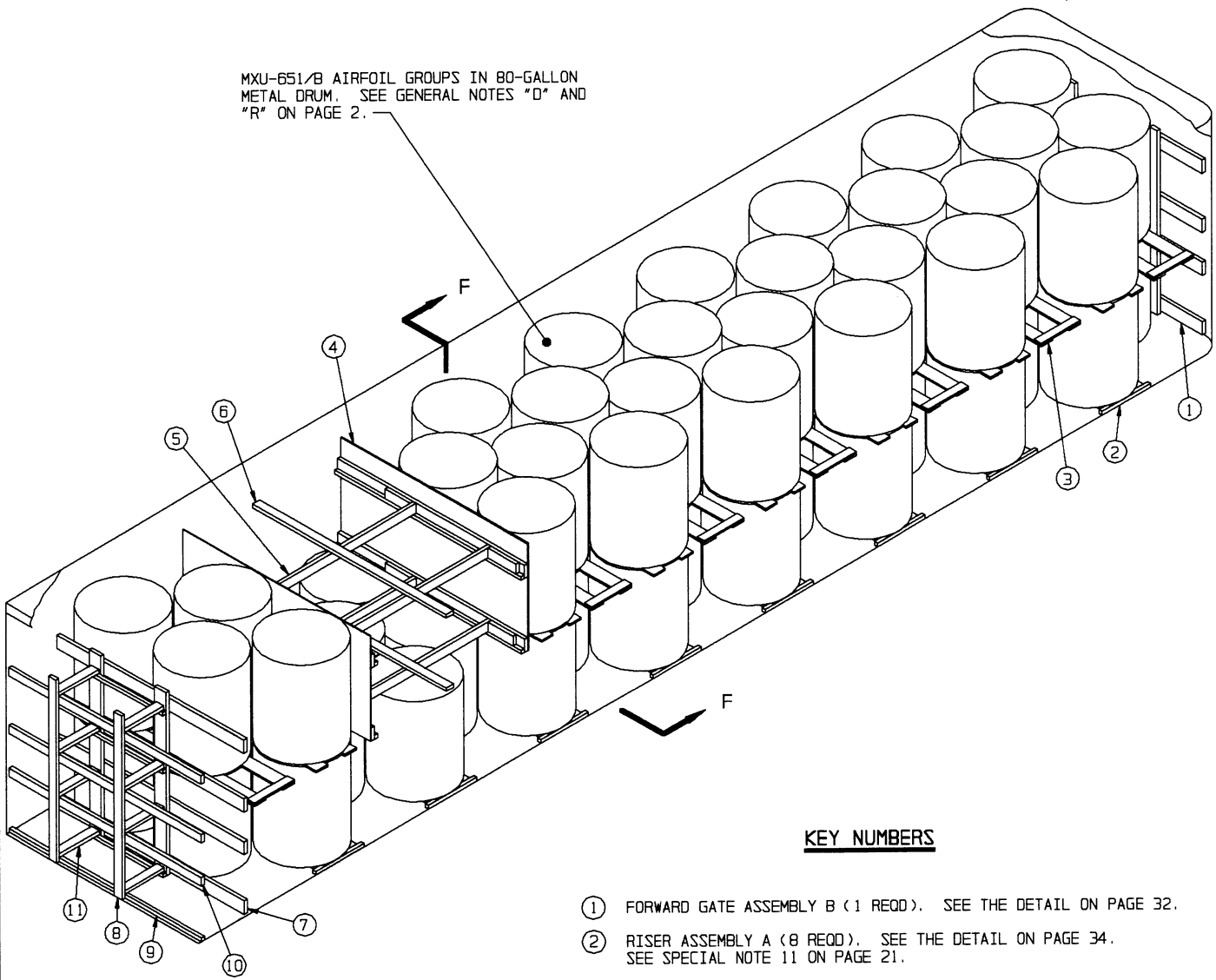
LUMBER	LINEAR FEET	BOARD FEET
1" X 6"	254	127
2" X 2"	77	26
2" X 4"	200	134
2" X 6"	73	73
NAILS	NO. REQD	POUNDS
6d (2")	170	1
10d (3")	150	2-1/2
12d (3-1/4")	32	3/4

LOAD AS SHOWN

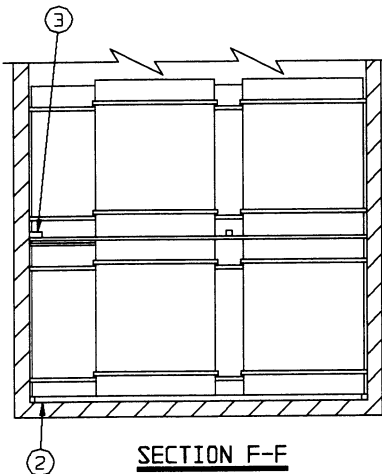
ITEM	QUANTITY	WEIGHT (APPROX)
80-GALLON DRUM	68	13,328 LBS
DUNNAGE		725 LBS
TOTAL WEIGHT		14,053 LBS (APPROX)

FORWARD END OF TRAILER. ↗

MXU-651/B AIRFOIL GROUPS IN 80-GALLON METAL DRUM. SEE GENERAL NOTES "D" AND "R" ON PAGE 2.



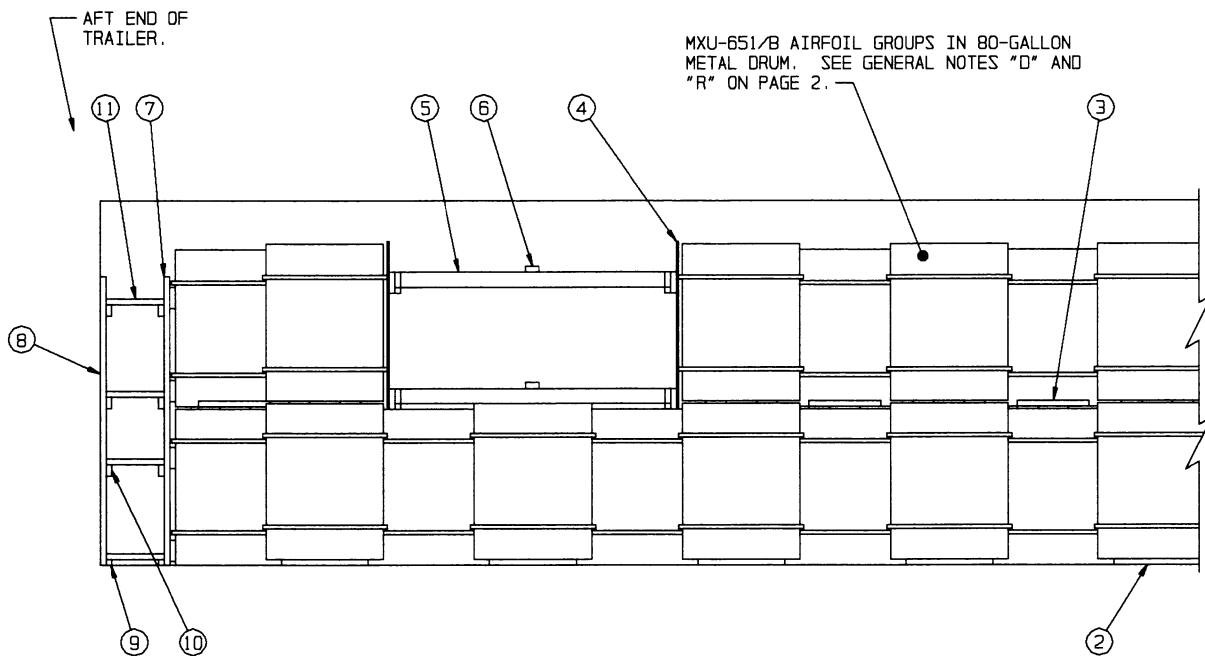
ISOMETRIC VIEW



SECTION F-F

KEY NUMBERS

- ① FORWARD GATE ASSEMBLY B (1 REQD). SEE THE DETAIL ON PAGE 32.
- ② RISER ASSEMBLY A (8 REQD). SEE THE DETAIL ON PAGE 34. SEE SPECIAL NOTE 11 ON PAGE 21.
- ③ DECK ASSEMBLY (14 REQD). SEE THE DETAIL ON PAGE 34. SEE GENERAL NOTE "R" ON PAGE 2.
- ④ PARTIAL LAYER GATE ASSEMBLY B (2 REQD/1 RIGHT HAND AND 1 LEFT HAND). SEE THE DETAIL ON PAGE 35. SEE SPECIAL NOTE 4 ON PAGE 21.
- ⑤ STRUT, 2" X 4" BY CUT-TO-FIT (4 REQD). NAIL TO PARTIAL LAYER GATE W/2-10d NAILS AT EACH END. SEE SPECIAL NOTE 4 ON PAGE 21.
- ⑥ STRUT BRACING, 2" X 4" BY TRAILER WIDTH MINUS 1/2" (2 REQD). NAIL TO THE STRUTS W/2-12d NAILS AT EACH JOINT.
- ⑦ REAR GATE ASSEMBLY B (1 REQD). SEE THE DETAIL ON PAGE 33.
- ⑧ STRUT BEARING PIECE, 2" X 4" X 6'-4" (2 REQD). POSITION IN LINE WITH THE STRUT BEARING PIECES ON REAR GATE ASSEMBLY B.
- ⑨ STRUT LEDGER, 2" X 2" BY TRAILER WIDTH MINUS 1/2" (1 REQD). POSITION AS SHOWN AND NAIL TO PIECES MARKED ⑧ W/2-10d NAILS AT EACH JOINT.
- ⑩ STRUT LEDGER, 2" X 4" BY TRAILER WIDTH MINUS 1/2" (3 REQD). POSITION AS SHOWN AND NAIL TO PIECES MARKED ⑧ W/2-10d NAILS AT EACH JOINT.
- ⑪ STRUT, 2" X 4" BY CUT-TO-FIT (8 REQD). POSITION AS SHOWN AND TOENAIL TO THE STRUT BEARING PIECES AND REAR GATE W/2-12d NAILS AT EACH END. SEE SPECIAL NOTES 3 AND 5 ON PAGE 21.



PARTIAL ELEVATION VIEW

SPECIAL NOTES:

1. A LESS-THAN-TRAILER LOAD OF 62 MXU-651/B AIRFOIL GROUPS IN 80-GALLON METAL DRUMS IS SHOWN IN A 7'-6" WIDE (INSIDE DIMENSION) BY 40'-0" LONG CONVENTIONAL VAN TRAILER.
2. A WIDER OR NARROWER TRAILER CAN BE USED FOR SHIPPING THE DEPICTED LOAD BY ADJUSTING THE WIDTH AND/OR LENGTH OF PIECES MARKED ①, ②, ③, ④, ⑦, ⑨, AND ⑩.
3. IF THE SPACE BETWEEN THE REAR OF THE LOAD AND THE TRAILER DOORS, WHEN CLOSED, IS 12" OR LESS, USE A SOLID FILL REAR BLOCKING AS SHOWN IN THE LOAD ON PAGE 4.
4. THE "PARTIAL LAYER GATE ASSEMBLY B" SHOWN AS PIECES MARKED ④, AND THE "STRUTS", SHOWN AS PIECES MARKED ⑤, MAY BE USED WHEN OMITTING TWO OR SIX METAL DRUMS FROM THE SECOND LAYER OF A LOAD. POSITION THE GATE ASSEMBLIES AGAINST THE STACKS OF METAL DRUMS WHICH ARE POSITIONED ON THE RISER ASSEMBLIES, AS SHOWN.
5. IF THE STRUTS SHOWN AS PIECES MARKED ⑩ ARE LONGER THAN 8'-0", SEE THE "STRUT BRACING DETAIL" ON PAGE 40.
6. THE PROCEDURES SHOWN ON PAGE 20 MAY BE USED IN TRAILERS HAVING NAILABLE OR NON-NAILABLE FLOORS.
7. TO SATISFY THE QUANTITY OF METAL DRUMS TO BE SHIPPED THE SECOND LAYER MAY BE OMITTED FROM THE LOAD ON PAGE 20. SEE THE "FORWARD GATE ASSEMBLY B" ON PAGE 32 AND THE "REAR GATE ASSEMBLY B" ON PAGE 33 FOR "ONE LAYER LOAD" GATE ASSEMBLIES. ALSO REDUCE THE HEIGHT OF PIECES MARKED ⑧ FROM 6'-4" TO 36". ONLY FOUR STRUTS SHOWN AS PIECES MARKED ⑩ ARE REQUIRED IN A ONE LAYER LOAD.

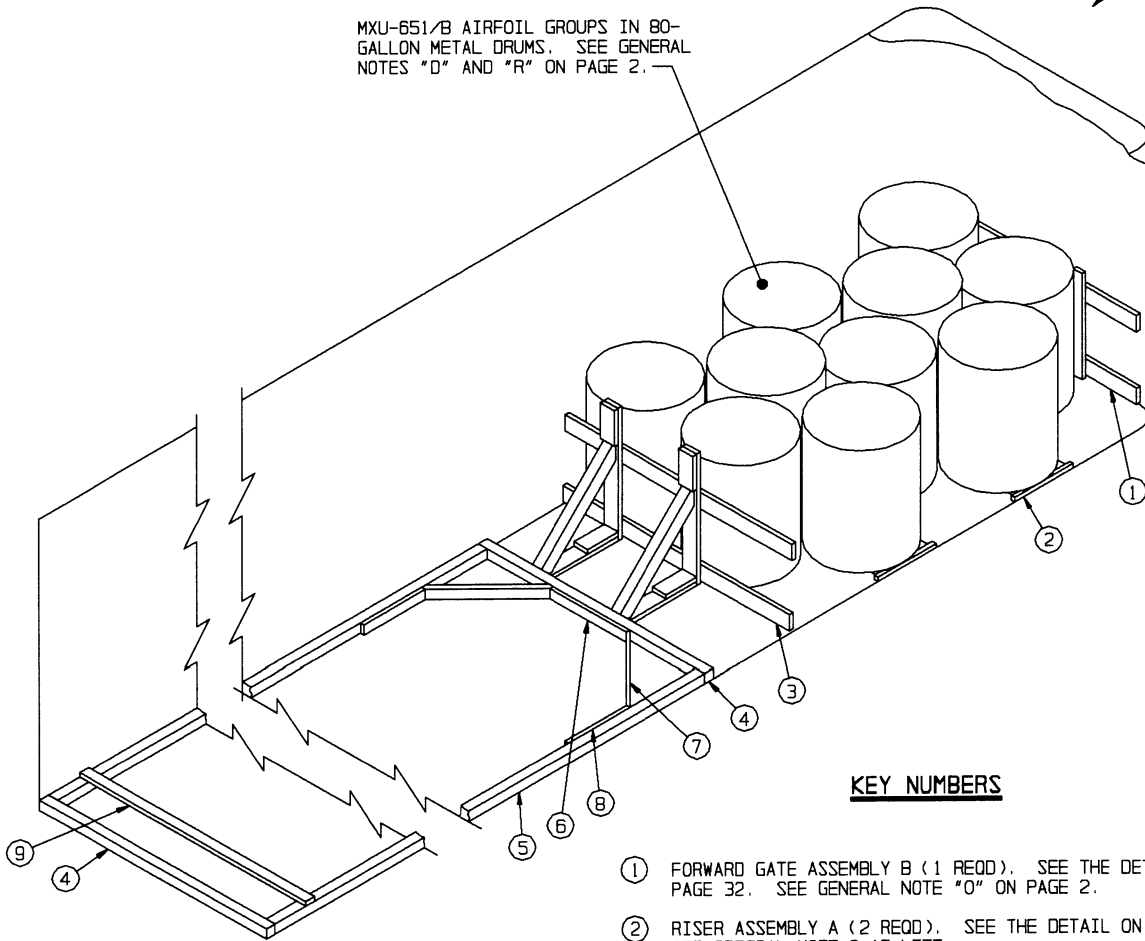
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(SPECIAL NOTES CONTINUED)

8. IF THE SPACE BETWEEN THE REAR OF THE ONE LAYER LOAD AND THE TRAILER DOORS, WHEN CLOSED, IS GREATER THAN 8'-0", USE THE "K-BRACE" METHOD OF REAR BLOCKING, AS SHOWN IN THE LOAD VIEW ON PAGE 22, IN LIEU OF PIECES MARKED ⑦, ⑧, ⑨, ⑩, AND ⑪ IN THE LOAD SHOWN ON PAGE 20.
9. SIXTY-TWO (62) METAL DRUMS ARE SHOWN AS A TYPICAL LOAD QUANTITY. THE ACTUAL NUMBER OF METAL DRUMS MAY BE MORE-OR-LESS DEPENDING ON THE QUANTITY TO BE SHIPPED. ADJUST THE DUNNAGE ASSEMBLIES AND OTHER BLOCKING AND BRACING MATERIAL AS NECESSARY.
10. IF THE TRAILER BEING OUTLOADED CONTAINS MECHANICAL BRACING DEVICES, AS DESCRIBED IN GENERAL NOTE "G" ON PAGE 2, SEE THE LOADS SHOWN ON PAGES 26 THROUGH 29.
11. IF DESIRED, THE "ALTERNATIVE RISER ASSEMBLY" SHOWN ON PAGE 34 MAY BE USED IN LIEU OF THE "RISER ASSEMBLY A" SHOWN IN THE LOAD ON PAGE 20.
12. WHEN LOADING THE TRAILER POSITION THE FIRST TWO BOTTOM DRUMS AT THE FORWARD END AGAINST THE FORWARD GATE ASSEMBLY B AS SHOWN IN THE "PARTIAL PLAN VIEW" ON PAGE 19. NEXT POSITION THE BOTTOM TWO DRUMS IN THE SECOND ROW TO NEST AGAINST THE FIRST TWO DRUMS AND MAKE ADJUSTMENTS TO THE SPACE BETWEEN DRUMS AS NECESSARY TO FORM THE CONFIGURATION SHOWN IN THE "PARTIAL PLAN VIEW" ON PAGE 19. PROCEED WITH THE REMAINDER OF THE LOAD.

FORWARD END OF TRAILER. →

MXU-651/B AIRFOIL GROUPS IN 80-GALLON METAL DRUMS. SEE GENERAL NOTES "D" AND "R" ON PAGE 2.



ISOMETRIC VIEW

KEY NUMBERS

- ① FORWARD GATE ASSEMBLY B (1 REQD). SEE THE DETAIL ON PAGE 32. SEE GENERAL NOTE "O" ON PAGE 2.
- ② RISER ASSEMBLY A (2 REQD). SEE THE DETAIL ON PAGE 34. SEE SPECIAL NOTE 6 AT LEFT.
- ③ KNEE BRACE ASSEMBLY B (1 REQD). SEE THE DETAIL ON PAGE 37. SEE SPECIAL NOTE 3 AT LEFT.
- ④ HEADER, 4" X 4" BY TRAILER WIDTH MINUS 1/2" (2 REQD). TOENAIL FORWARD HEADER TO KNEE BRACES MARKED ③ W/2-12d NAILS EACH. SEE SPECIAL NOTE 3 AT LEFT.
- ⑤ SIDE STRUT, 4" X 4" BY CUT-TO-FIT (2 REQD). TOENAIL TO THE HEADERS W/2-12d NAILS AT EACH END.
- ⑥ CENTER CLEAT, 2" X 4" X 30" (1 REQD). CENTER ON AND NAIL TO THE FORWARD HEADER W/7-12d NAILS.
- ⑦ DIAGONAL BRACE, 2" X 4" BY CUT-TO-FIT (2 REQD). DOUBLE BEVEL EACH END WITH 45° CUTS. INSTALL AT A 45° ANGLE AND TOENAIL TO THE HEADER AND SIDE STRUT W/2-16d NAILS AT EACH END.
- ⑧ BACK-UP CLEAT, 2" X 4" X 24" (2 REQD). POSITION AGAINST END OF DIAGONAL BRACE AND NAIL TO THE STRUT W/6-12d NAILS.
- ⑨ STRUT BRACING, 2" X 4" BY TRAILER WIDTH (CUT-TO-FIT) (MINIMUM OF ONE REQD). INSTALL ONE (1) NEAR THE ENDS OF THE SIDE STRUTS AS SHOWN. ONE (1) ADDITIONAL PIECE IS REQUIRED FOR EVERY 7'-0" OF STRUT LENGTH. NAIL TO THE SIDE STRUTS W/3-10d NAILS AT EACH END.

SPECIAL NOTES:

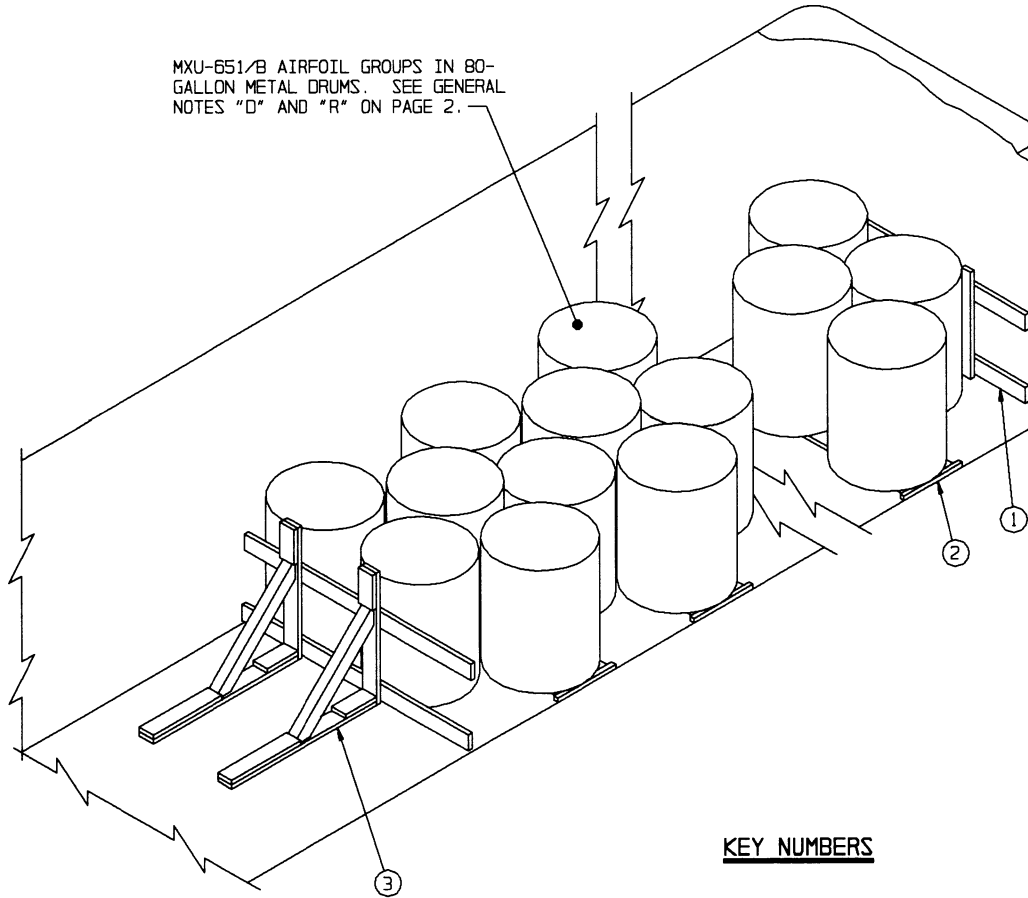
- 1. A LESS-THAN-TRAILER LOAD OF 10 MXU-651/B AIRFOIL GROUPS IN 80-GALLON METAL DRUMS IS SHOWN IN A 7'-6" WIDE (INSIDE DIMENSION) CONVENTION VAN TRAILER HAVING A NON-NAILABLE FLOOR.
- 2. A WIDER OR NARROWER TRAILER CAN BE USED FOR SHIPPING THE DEPICTED LOAD BY ADJUSTING THE WIDTH AND/OR LENGTH OF PIECES MARKED ①, ②, ③, ④, AND ⑨.
- 3. THE PROCEDURES SHOWN ABOVE DEPICT THE USE OF A "K-BRACE" METHOD AND A "KNEE-BRACE" METHOD OF BLOCKING IN A TRAILER EQUIPPED WITH A NON-NAILABLE FLOOR. THE METHOD SHOWN IS ADEQUATE FOR RETAINING A ONE LAYER LOAD OF 2 THROUGH 32 METAL DRUMS (6,272 POUNDS). NOTE: WHEN FABRICATING THE "KNEE-BRACE" ASSEMBLY OMIT THE 2" X 6" X 30" BACK-UP CLEAT AND REDUCE THE LENGTH OF THE FLOOR CLEAT FROM 57" TO 27". IF THE TRAILER IS EQUIPPED WITH A NAILABLE FLOOR SEE THE PROCEDURES SHOWN IN THE LTL LOAD ON PAGE 23. HOWEVER, THE PROCEDURES SHOWN ON THIS PAGE MAY ALSO BE USED IN TRAILERS HAVING A NAILABLE FLOOR.
- 4. TEN (10) METAL DRUMS ARE SHOWN AS A TYPICAL LOAD QUANTITY. THE ACTUAL NUMBER OF METAL DRUMS MAY BE MORE-OR-LESS DEPENDING ON THE QUANTITY TO BE SHIPPED. ADJUST THE DUNNAGE ASSEMBLIES AND BRACING MATERIAL AS NECESSARY.
- 5. IF THE TRAILER BEING OUTLOADED CONTAINS MECHANICAL BRACING DEVICES, AS DESCRIBED IN GENERAL NOTE "G" ON PAGE 2, SEE THE LOADS SHOWN ON PAGES 26 THROUGH 29.
- 6. IF DESIRED THE "ALTERNATIVE RISER ASSEMBLY" SHOWN ON PAGE 34 MAY BE USED IN LIEU OF THE "RISER ASSEMBLY A" SHOWN IN THE LOAD VIEW ON THIS PAGE.

(SPECIAL NOTES CONTINUED)

- 7. WHEN LOADING THE TRAILER POSITION THE FIRST TWO DRUMS AT THE FORWARD END AGAINST THE FORWARD GATE ASSEMBLY B AS SHOWN IN THE "PARTIAL PLAN VIEW" ON PAGE 19. NEXT POSITION THE TWO DRUMS IN THE SECOND ROW TO NEST AGAINST THE FIRST TWO DRUMS AND MAKE ADJUSTMENTS TO THE SPACE BETWEEN DRUMS AS NECESSARY TO FORM THE CONFIGURATION SHOWN IN THE "PARTIAL PLAN VIEW" ON PAGE 19. PROCEED WITH THE REMAINDER OF THE LOAD.

(CONTINUED AT RIGHT)

FORWARD END OF TRAILER. →



ISOMETRIC VIEW

KEY NUMBERS

- ① FORWARD GATE ASSEMBLY B (1 REQD). SEE THE DETAIL ON PAGE 32.
- ② RISER ASSEMBLY A (AS REQD). SEE THE DETAIL ON PAGE 34. SEE SPECIAL NOTE 6 AT LEFT.
- ③ KNEE BRACE ASSEMBLY B (1 REQD). NAIL TO THE TRAILER FLOOR W/12-12d NAILS. SEE THE DETAIL ON PAGE 37. SEE SPECIAL NOTE 3 AT LEFT.

SPECIAL NOTES:

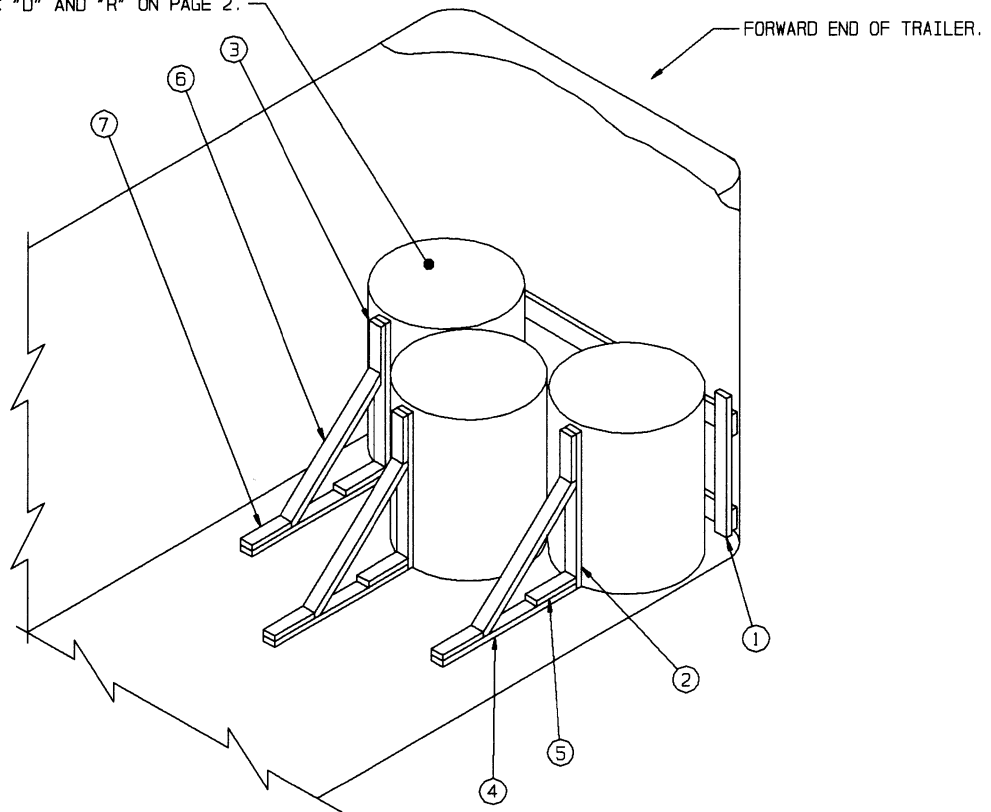
- 1. A LESS-THAN-TRAILER LOAD OF MXU-651/B AIRFOIL GROUPS IN 80-GALLON METAL DRUMS IS SHOWN IN A 7'-6" WIDE (INSIDE DIMENSION) CONVENTIONAL VAN TRAILER HAVING A NAILABLE FLOOR.
- 2. A WIDER OR NARROWER TRAILER CAN BE USED FOR SHIPPING THE DEPICTED LOAD BY ADJUSTING THE WIDTH AND/OR LENGTH OF PIECES MARKED ① , ② , AND ③ .
- 3. THE PROCEDURES SHOWN ABOVE DEPICT THE USE OF A "KNEE-BRACE" METHOD OF BLOCKING IN A TRAILER EQUIPPED WITH A NAILABLE FLOOR. THE "KNEE-BRACE ASSEMBLY B", SHOWN AS PIECE MARKED ③ , IS ADEQUATE FOR RETAINING A ONE LAYER LOAD OF 2 THROUGH 32 METAL DRUMS (6,272 POUNDS). IF THE TRAILER IS EQUIPPED WITH A NON-NAILABLE FLOOR, USE THE PROCEDURES SHOWN IN THE LTL LOAD ON PAGE 22.
- 4. A PARTIAL ONE LAYER LOAD IS SHOWN AS TYPICAL. THE ACTUAL NUMBER OF METAL DRUMS MAY BE MORE-OR-LESS DEPENDING ON THE QUANTITY TO BE SHIPPED. ADJUST THE DUNNAGE ASSEMBLIES AND OTHER BLOCKING AND BRACING MATERIAL AS NECESSARY.
- 5. IF THE TRAILER BEING OUTLOADED CONTAINS MECHANICAL BRACING DEVICES, AS DESCRIBED IN GENERAL NOTE "G" ON PAGE 2, SEE THE LOADS SHOWN ON PAGES 26 THROUGH 29.
- 6. IF DESIRED THE "ALTERNATIVE RISER ASSEMBLY" SHOWN ON PAGE 34 MAY BE USED IN LIEU OF THE "RISER ASSEMBLY A" SHOWN IN THE LOAD ON THIS PAGE.

(SPECIAL NOTES CONTINUED)

- 7. WHEN LOADING THE TRAILER POSITION THE FIRST TWO DRUMS AT THE FORWARD END AGAINST THE FORWARD GATE ASSEMBLY B AS SHOWN IN THE "PARTIAL PLAN VIEW" ON PAGE 19. NEXT POSITION THE TWO DRUMS IN THE SECOND ROW TO NEST AGAINST THE FIRST TWO DRUMS AND MAKE ADJUSTMENTS TO THE SPACE BETWEEN THE DRUMS AS NECESSARY TO FORM THE CONFIGURATION SHOWN IN THE "PARTIAL PLAN VIEW" ON PAGE 19. PROCEED WITH THE REMAINDER OF THE LOAD.

(CONTINUED AT RIGHT)

MXU-651/B AIRFOIL GROUPS IN 80-GALLON METAL DRUMS. SEE GENERAL NOTES "D" AND "R" ON PAGE 2.



ISOMETRIC VIEW

KEY NUMBERS

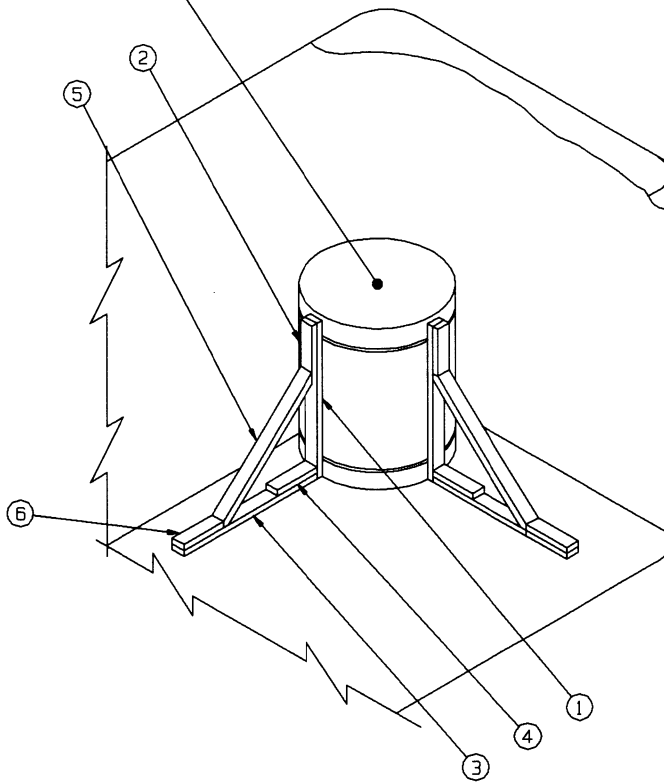
SPECIAL NOTES:

1. A LESS-THAN-TRAILER LOAD OF 3 MXU-651/B AIRFOIL GROUPS IN 80-GALLON METAL DRUM IS SHOWN IN A 7'-6" WIDE (INSIDE DIMENSION) CONVENTIONAL VAN TRAILER HAVING A NAILABLE FLOOR.
2. EACH KNEE-BRACE ASSEMBLY WILL RETAIN A LOAD OF 2,000 POUNDS.
3. CENTER EACH KNEE-BRACE ON AN 80-GALLON METAL DRUM.
4. THREE (3) METAL DRUMS ARE SHOWN AS A TYPICAL LOAD QUANTITY. THE ACTUAL NUMBER OF METAL DRUMS MAY BE MORE-OR-LESS DEPENDING ON THE QUANTITY TO BE SHIPPED. HOWEVER, IF THE LOAD CONSISTS OF AN EVEN NUMBER OF METAL DRUMS SUCH AS 2, 4, 6, ETC; USE THE PROCEDURES SHOWN ON PAGE 23.
5. IF THE TRAILER BEING OUTLOADED CONTAINS MECHANICAL BRACING DEVICES, AS DESCRIBED IN GENERAL NOTE "G" ON PAGE 2, SEE THE LOADS SHOWN ON PAGES 26 THROUGH 29.

- ① FORWARD GATE ASSEMBLY C (1 REQD). SEE THE DETAIL ON PAGE 39.
- ② VERTICAL PIECE, 2" X 4" X 40" (1 REQD).
- ③ HOLD DOWN CLEAT, 2 X 4" X 12" (1 REQD). NAIL TO THE VERTICAL PIECE W/3-10d NAILS.
- ④ HORIZONTAL BRACE, 2" X 4" X 40" (1 REQD). NAIL TO THE TRAILER FLOOR W/6-12d NAILS.
- ⑤ SUPPORT PIECE, 2" X 4" X 12" (1 REQD). NAIL TO THE HORIZONTAL BRACE W/3-12d NAILS. TOENAIL TO THE VERTICAL PIECE W/2-12d NAILS.
- ⑥ DIAGONAL BRACE, 2" X 4" X 38" (1 REQD). DOUBLE BEVEL EACH END WITH 45° CUTS. INSTALL AT 45° ANGLE AS SHOWN AND TOENAIL TO THE VERTICAL PIECE AND THE HORIZONTAL PIECE W/2-12d NAILS AT EACH END.
- ⑦ BACK-UP CLEAT, 2" X 4" X 12" (1 REQD). POSITION AGAINST THE DIAGONAL BRACE AND NAIL TO THE HORIZONTAL BRACE W/4-12d NAILS.

MXU-651/B AIRFOIL GROUPS IN 80-GALLON METAL DRUMS. SEE GENERAL NOTES "D" AND "R" ON PAGE 2.

FORWARD END OF TRAILER.



ISOMETRIC VIEW

KEY NUMBERS

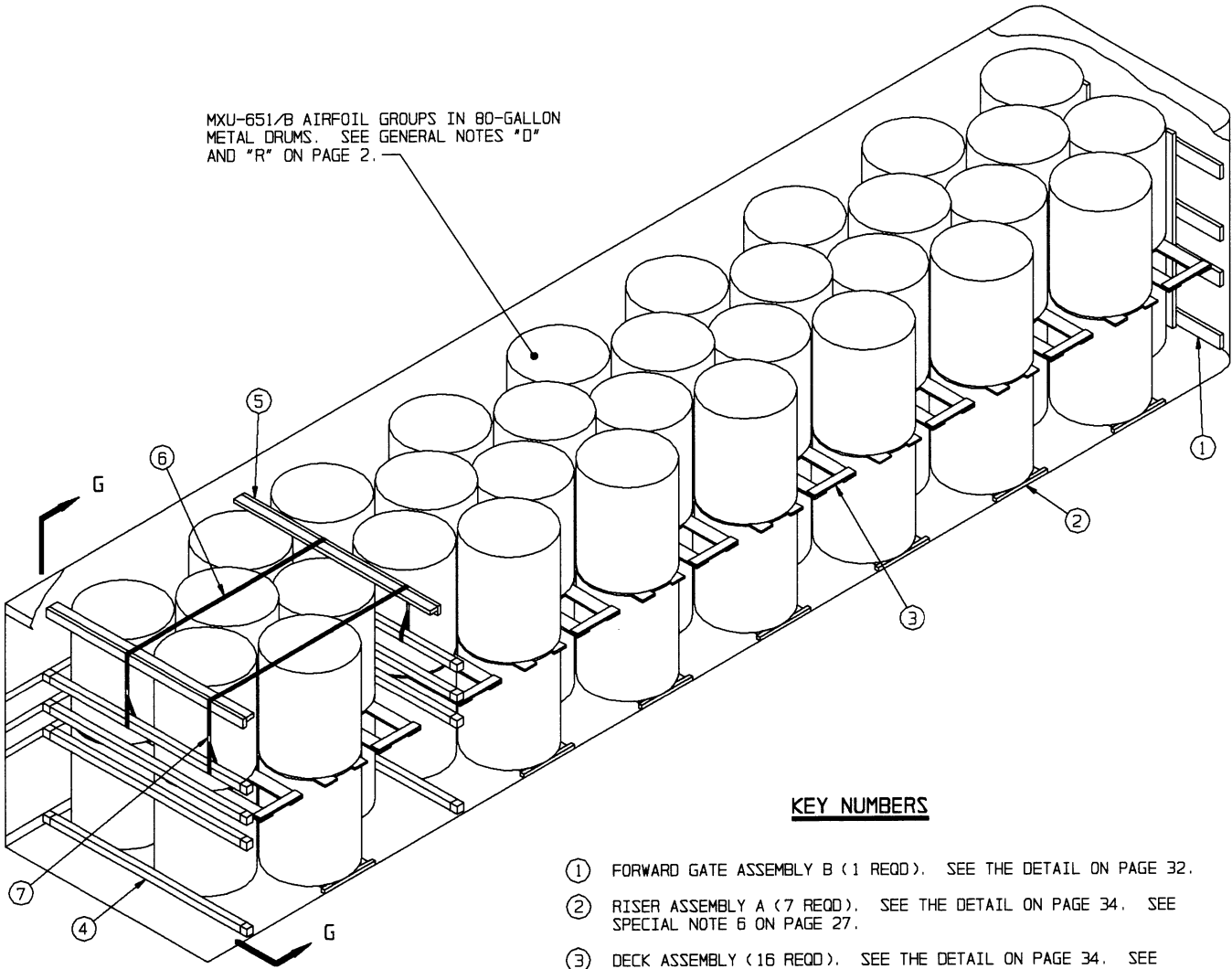
SPECIAL NOTES:

1. A LESS-THAN-TRAILER LOAD OF 1 MXU-651/B AIRFOIL GROUPS IN 80-GALLON METAL DRUM IS SHOWN IN A 7'-6" WIDE (INSIDE DIMENSION) CONVENTIONAL VAN TRAILER HAVING A NAILABLE FLOOR.
2. EACH KNEE-BRACE ASSEMBLY WILL RETAIN A LOAD OF 2,000 POUNDS.
3. THE METHOD SHOWN ABOVE MAY BE USED FOR MORE THAN ONE 80-GALLON METAL DRUM IN THE SAME VEHICLE.
4. CENTER EACH KNEE-BRACE ON THE 80-GALLON DRUM.
5. IF THE TRAILER BEING OUTLOADED CONTAINS MECHANICAL BRACING DEVICES, AS DESCRIBED IN GENERAL NOTE "G" ON PAGE 2, SEE THE LOADS SHOWN ON PAGES 26 THROUGH 29.

- ① VERTICAL PIECE, 2" X 4" X 40" (1 REQD).
- ② HOLD DOWN CLEAT, 2 X 4" X 12" (1 REQD). NAIL TO THE VERTICAL PIECE W/3-10d NAILS.
- ③ HORIZONTAL BRACE, 2" X 4" X 40" (1 REQD). NAIL TO THE TRAILER FLOOR W/6-12d NAILS.
- ④ SUPPORT PIECE, 2" X 4" X 12" (1 REQD). NAIL TO THE HORIZONTAL BRACE W/3-12d NAILS. TOENAIL TO THE VERTICAL PIECE W/2-12d NAILS.
- ⑤ DIAGONAL BRACE, 2" X 4" X 38" (1 REQD). DOUBLE BEVEL EACH END WITH 45° CUTS. INSTALL AT 45° ANGLE AS SHOWN AND TOENAIL TO THE VERTICAL PIECE AND THE HORIZONTAL PIECE W/2-12d NAILS AT EACH END.
- ⑥ BACK-UP CLEAT, 2" X 4" X 12" (1 REQD). POSITION AGAINST THE DIAGONAL BRACE AND NAIL TO THE HORIZONTAL BRACE W/4-12d NAILS.

FORWARD END OF TRAILER. →

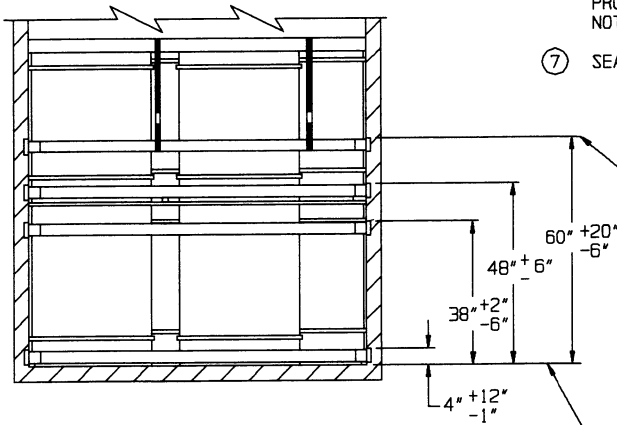
MXU-651/B AIRFOIL GROUPS IN 80-GALLON METAL DRUMS. SEE GENERAL NOTES "D" AND "R" ON PAGE 2.



ISOMETRIC VIEW

KEY NUMBERS

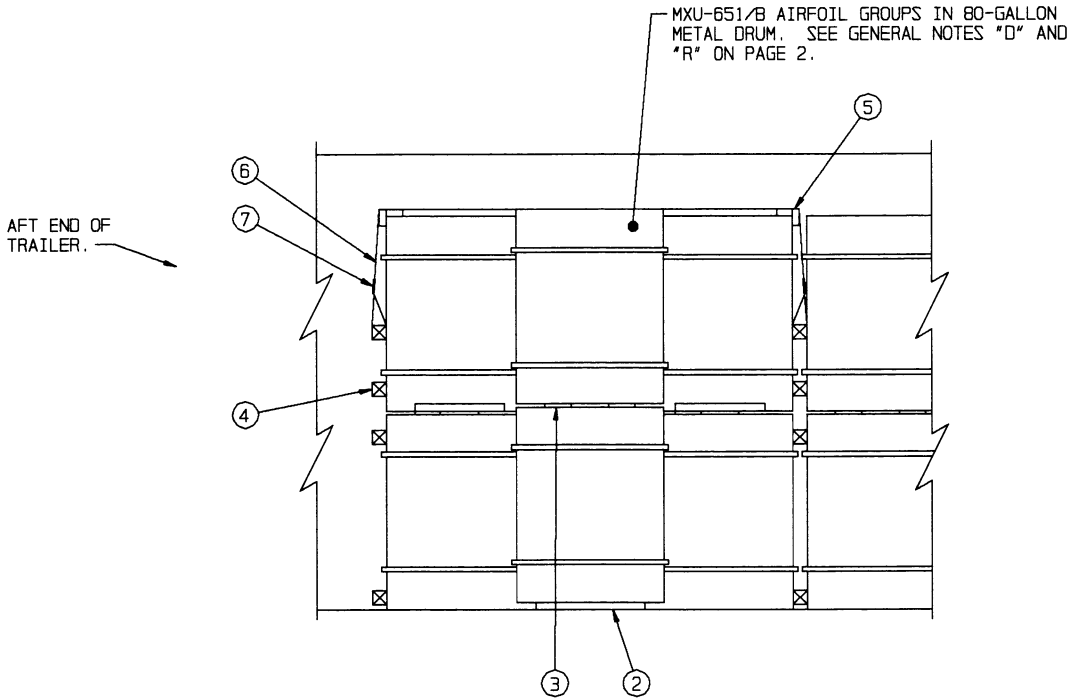
- ① FORWARD GATE ASSEMBLY B (1 REQD). SEE THE DETAIL ON PAGE 32.
- ② RISER ASSEMBLY A (7 REQD). SEE THE DETAIL ON PAGE 34. SEE SPECIAL NOTE 6 ON PAGE 27.
- ③ DECK ASSEMBLY (16 REQD). SEE THE DETAIL ON PAGE 34. SEE GENERAL NOTE "R" ON PAGE 2.
- ④ CROSS MEMBER (8 REQD). POSITION AT THE HEIGHTS SPECIFIED IN "SECTION G-G" BELOW. SEE GENERAL NOTE "G" ON PAGE 2.
- ⑤ STRAPPING BOARD (2 REQD). SEE THE DETAIL ON PAGE 34. SEE SPECIAL NOTE 3 ON PAGE 27.
- ⑥ STEEL STRAPPING, 1-1/4" X .035" OR .031" BY LENGTH-TO-SUIT (2 REQD). INSTALL STRAPPING AND STRAPPING BOARD AS LOADING PROGRESSES. SEE GENERAL NOTE "O" ON PAGE 2. SEE SPECIAL NOTE 3 ON PAGE 27.
- ⑦ SEAL FOR 1-1/4" STEEL STRAPPING (4 REQD).



THESE DIMENSIONED HEIGHTS SPECIFY THE DISTANCE THE TOP SURFACE OF A CROSS MEMBER IS TO BE ABOVE THE TRAILER FLOOR.

INDICATES TRAILER FLOOR.

SECTION G-G



PARTIAL ELEVATION VIEW

SPECIAL NOTES:

1. A LOAD OF 64 MXU-651/B AIRFOIL GROUPS IN 80-GALLON METAL DRUMS IS SHOWN IN A 7'-6" WIDE (INSIDE DIMENSION) BY 40'-0" LONG VAN TRAILER EQUIPPED WITH A MECHANICAL LOAD BLOCKING SYSTEM THAT CONTAINS AT LEAST EIGHT (8) CROSS MEMBERS AND IS AT LEAST 38'-0" IN LENGTH, AS MEASURED FROM THE FRONT WALL OF THE TRAILER.
2. A WIDER OR NARROWER TRAILER CAN BE USED FOR SHIPPING THE DEPICTED LOAD BY ADJUSTING THE WIDTH AND/OR LENGTH OF PIECES MARKED ①, ②, ③, AND ⑤.
3. IF THE TRAILER BEING LOADED HAS PROVISIONS FOR CROSS MEMBERS AT A HEIGHT OF 64" TO 82" PIECES MARKED ⑤, ⑥, ⑦ AND THE FOUR CROSS MEMBERS MARKED ④, IN THE MIDDLE OF THE LOAD, THEY MAY BE OMITTED. POSITION THE TOP CROSS MEMBER AT THE REAR OF THE LOAD, AS HIGH AS POSSIBLE ON THE SECOND LAYER DRUM.
4. FOR METHODS OF BLOCKING LESS-THAN-TRAILER LOADS, SEE THE PROCEDURES ON PAGES 28 AND 29 AND SPECIAL NOTE 5 ON THIS PAGE.

(CONTINUED AT RIGHT)

(SPECIAL NOTES CONTINUED)

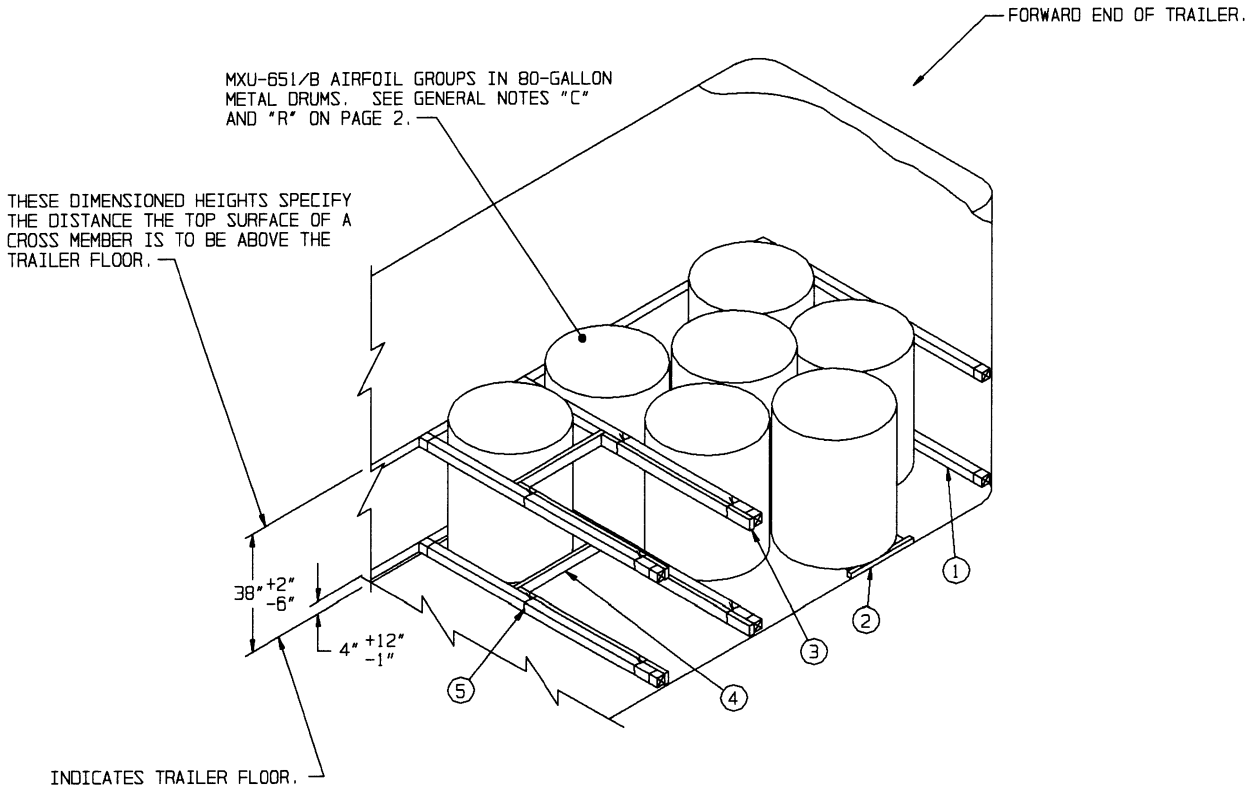
5. TO SATISFY THE QUANTITY OF METAL DRUMS TO BE SHIPPED THE SECOND LAYER MAY BE OMITTED FROM THE LOAD, OR THE LOAD MAY BE REDUCED BY OMITTING ONE OR MORE STACKS OF FOUR METAL DRUMS EACH (2 WIDE AND 2 HIGH), OR THE LOAD MAY CONSIST OF A FULL BOTTOM LAYER AND A PARTIAL SECOND LAYER.
6. IF DESIRED, THE "ALTERNATIVE RISER ASSEMBLY" SHOWN ON PAGE 34 MAY BE USED IN LIEU OF THE "RISER ASSEMBLY A" SHOWN IN THE LOAD ON PAGE 26.
7. WHEN LOADING THE TRAILER POSITION THE FIRST TWO BOTTOM DRUMS AT THE FORWARD END AGAINST THE CROSS MEMBERS. NEXT POSITION THE BOTTOM TWO DRUMS IN THE SECOND ROW TO NEST AGAINST THE FIRST TWO DRUMS AND MAKE ADJUSTMENTS TO THE SPACE BETWEEN DRUMS AS NECESSARY TO FORM THE CONFIGURATION SHOWN IN THE "PARTIAL PLAN VIEW" ON PAGE 19. PROCEED WITH THE REMAINDER OF THE LOAD.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
1" X 6"	240	120
2" X 2"	48	16
2" X 4"	170	114
2" X 6"	30	30
NAILS	NO. REQD	POUNDS
6d (2")	160	1
10d (3")	94	1-1/2
STEEL STRAPPING, 1-1/4" X .035" - 36' REQD - - 6 LBS		
SEAL FOR 1-1/4" STRAPPING - - - - - 4 REQD - - - NIL		

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
80-GALLON DRUM	64	12,544 LBS
DUNNAGE		569 LBS

TOTAL WEIGHT - - - - - 13,113 LBS (APPROX)



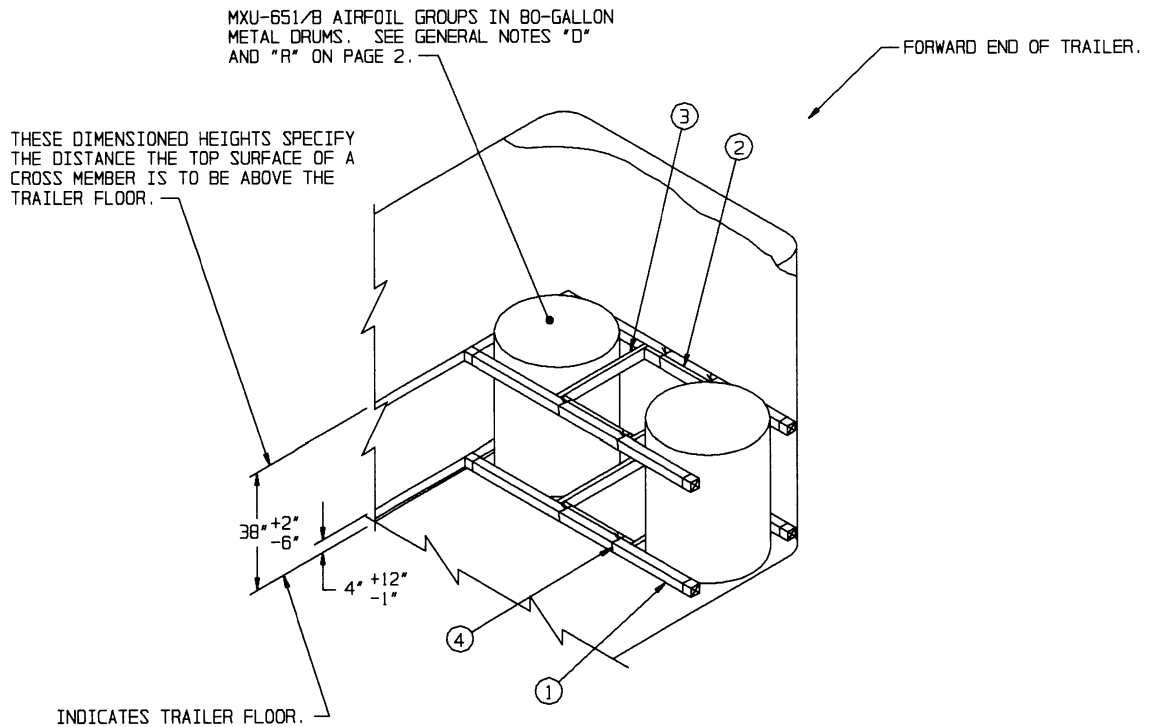
ISOMETRIC VIEW

KEY NUMBERS

- ① CROSS MEMBER (6 REQD). POSITION AT THE HEIGHTS SPECIFIED. SEE GENERAL NOTE "G" ON PAGE 2.
- ② RISER ASSEMBLY A (1 REQD). SEE THE DETAIL ON PAGE 34. SEE SPECIAL NOTE 5 AT LEFT.
- ③ LATERAL SUPPORT PIECE, 2" X 4" BY CUT-TO-FIT (4 REQD). WIRE TIE TO THE CROSS MEMBER WITH NO. 14 GAGE WIRE AS SHOWN.
- ④ LOAD BEARING PIECE, 2" X 4" BY CUT-TO-FIT (2 REQD). NAIL TO PIECE MARKED ③ W/2-10d NAILS AT EACH END.
- ⑤ WIRE, NO. 14 GAGE (AS REQD). WRAP AROUND PIECES MARKED ① AND ③ AND TWIST ENDS TOGETHER.

SPECIAL NOTES:

1. A LESS-THAN-TRAILER LOAD OF 7 MXU-651/B AIRFOIL GROUPS IN 80-GALLON METAL DRUMS IS SHOWN IN A 7'-6" WIDE (INSIDE DIMENSION) VAN TRAILER EQUIPPED WITH A MECHANICAL LOAD BLOCKING SYSTEM.
2. A WIDER OR NARROWER TRAILER CAN BE USED FOR SHIPPING THE DEPICTED LOAD BY ADJUSTING THE LENGTH OF PIECES MARKED ② AND ③.
3. SEVEN (7) METAL DRUMS ARE SHOWN AS A TYPICAL LOAD QUANTITY. THE ACTUAL NUMBER OF METAL DRUMS MAY BE MORE-OR-LESS DEPENDING ON THE QUANTITY TO BE SHIPPED. ADJUST THE DUNNAGE ASSEMBLIES AND OTHER BLOCKING AND BRACING MATERIAL AS NECESSARY.
4. THE PROCEDURES SHOWN ABOVE MAY BE USED WHEN SHIPPING ONE METAL DRUM, OR AT THE REAR OF A ONE LAYER LOAD TO HELP ADJUST THE LOAD QUANTITY.
5. IF DESIRED THE "ALTERNATIVE RISER ASSEMBLY" SHOWN ON PAGE 34 MAY BE USED IN LIEU OF THE "RISER ASSEMBLY A" SHOWN IN THE LOAD ON THIS PAGE.
6. WHEN LOADING THE TRAILER POSITION THE FIRST TWO DRUMS AT THE FORWARD END AGAINST THE CROSS MEMBERS. NEXT POSITION THE TWO DRUMS IN THE SECOND ROW TO NEST AGAINST THE FIRST TWO DRUMS AND MAKE ADJUSTMENTS TO THE SPACE BETWEEN DRUMS AS NECESSARY TO FORM THE CONFIGURATION SHOWN IN THE "PARTIAL PLAN VIEW" ON PAGE 19. PROCEED WITH THE REMAINDER OF THE LOAD.



ISOMETRIC VIEW

KEY NUMBERS

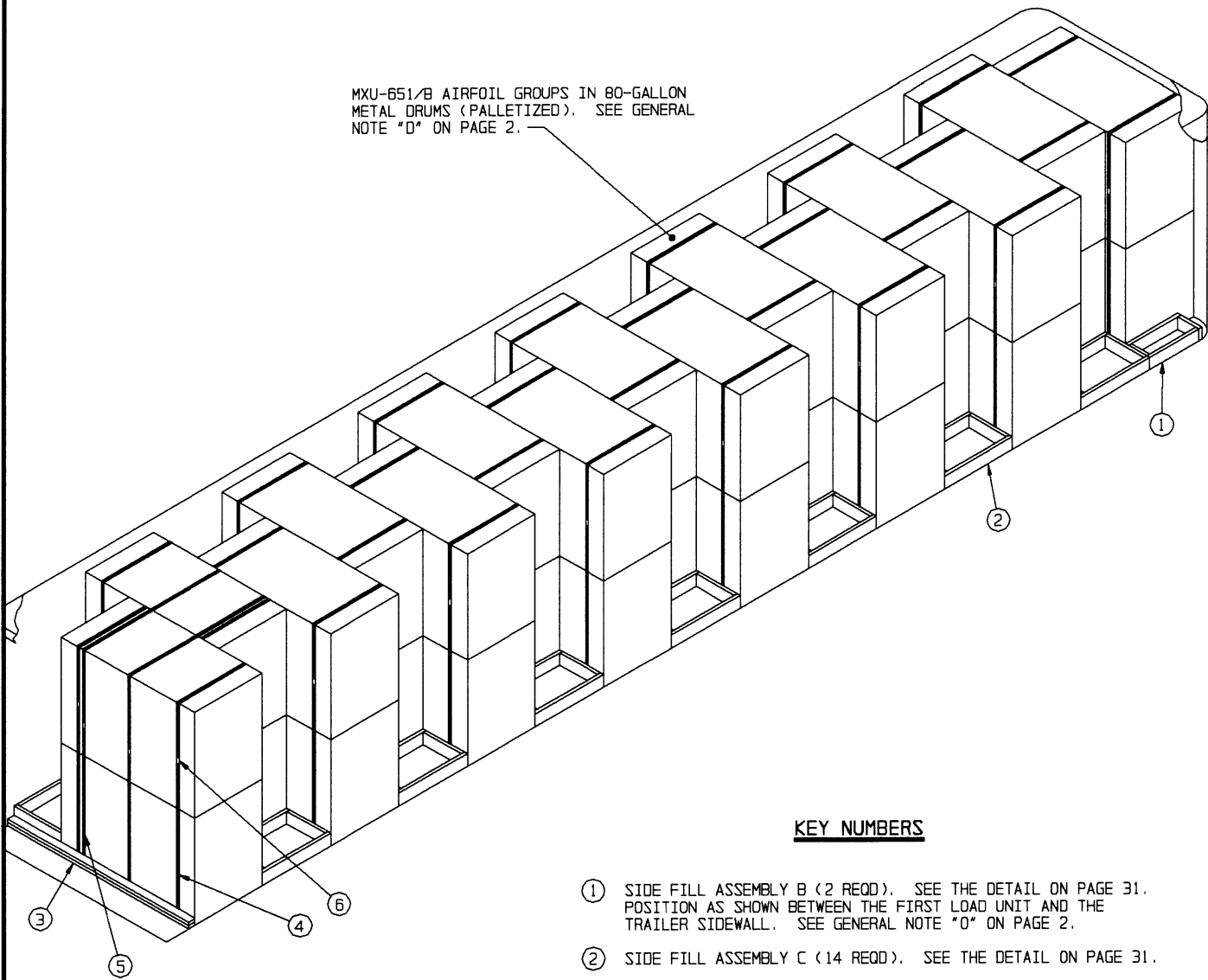
SPECIAL NOTES:

1. A LESS-THAN-FULL TRAILER LOAD OF 2 MXU-651/B AIRFOIL GROUPS IN 80-GALLON METAL DRUMS IS SHOWN IN A 7'-6" WIDE (INSIDE DIMENSION) VAN TRAILER EQUIPPED WITH A MECHANICAL LOAD BRACING SYSTEM.
2. A WIDER OR NARROWER TRAILER CAN BE USED FOR SHIPPING THE DEPICTED LOAD BY ADJUSTING THE LENGTH OF PIECES MARKED ②.
3. THE PROCEDURES SHOWN ABOVE ARE ONLY TO BE USED WHEN SHIPPING TWO METAL DRUMS.

- ① CROSS MEMBER (4 REQD). POSITION AT THE HEIGHTS SPECIFIED. SEE GENERAL NOTE "G" ON PAGE 2.
- ② LATERAL SUPPORT PIECE, 2" X 4" BY CUT-TO-FIT (4 REQD). WIRE TIE TO THE CROSS MEMBER WITH NO. 14 GAGE WIRE, AS SHOWN.
- ③ LOAD BEARING PIECE, 2" X 4" BY CUT-TO-FIT (4 REQD). NAIL TO PIECE MARKED ② W/2-10d NAILS AT EACH END.
- ④ WIRE, NO. 14 GAGE (AS REQD). WRAP AROUND PIECES MARKED ① AND ② AND TWIST ENDS TOGETHER.

FORWARD END OF TRAILER. ↗

MXU-651/B AIRFOIL GROUPS IN 80-GALLON METAL DRUMS (PALLETIZED). SEE GENERAL NOTE "D" ON PAGE 2.



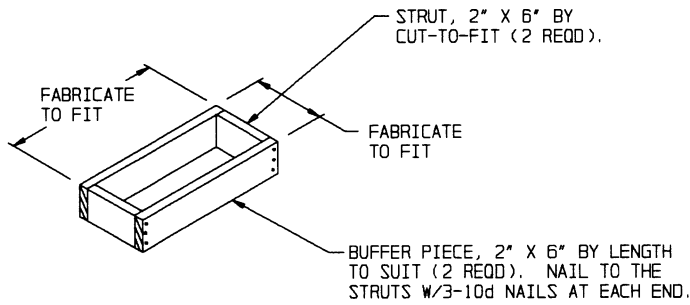
ISOMETRIC VIEW

KEY NUMBERS

- ① SIDE FILL ASSEMBLY B (2 REQD). SEE THE DETAIL ON PAGE 31. POSITION AS SHOWN BETWEEN THE FIRST LOAD UNIT AND THE TRAILER SIDEWALL. SEE GENERAL NOTE "O" ON PAGE 2.
- ② SIDE FILL ASSEMBLY C (14 REQD). SEE THE DETAIL ON PAGE 31.
- ③ REAR BLOCKING, 2" X 4" BY INSIDE TRAILER WIDTH MINUS 1/2" IN LENGTH (DOUBLED) (1 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/10-10d. NAIL THE SECOND PIECE TO THE FIRST A LIKE MANNER.
- ④ UNITIZING STRAP, 1-1/4" X .035" OR .031" X 23'-0" LONG STEEL STRAPPING (30 REQD, 2 PER LOAD UNIT). INSTALL SO AS TO ENCIRCLE TWO PALLET UNITS AS SHOWN.
- ⑤ DOOR WAY PROTECTION STRAP, 1-1/4" X .035" OR .031" X 29'-0" LONG STEEL STRAPPING (2 REQD). PRE-POSITION PRIOR TO LOADING SO AS TO ENCIRCLE THE REAR TWO LOAD UNITS AS SHOWN.
- ⑥ SEAL FOR 1-1/4" STRAPPING (32 REQD, 1 PER STRAP). SEE GENERAL NOTE "O" ON PAGE 2.

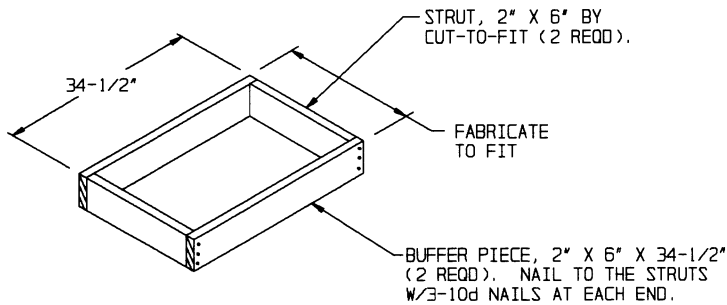
SPECIAL NOTES:

1. A LOAD OF 60 MXU-651/B AIRFOIL GROUPS IN 80-GALLON METAL DRUMS (PALLETIZED) IS SHOWN IN A 7'-6" WIDE (INSIDE DIMENSION) BY 45'-0" LONG CONVENTIONAL VAN TRAILER.
2. A WIDER OR NARROWER TRAILER CAN BE USED FOR SHIPPING THE DEPICTED LOAD BY ADJUSTING THE WIDTH OF THE SIDE FILL ASSEMBLIES, PIECES MARKED ① AND ② .
3. IF THE TRAILER BEING LOADED HAS SOAURE CORNERS AT THE FORWARD END, THE SIDE FILL ASSEMBLIES C AT THE FORWARD END OF THE LOAD MAY BE ADJUSTED IN LENGTH AS NECESSARY.
4. TO SATISFY THE QUANTITY OF PALLET UNITS TO BE SHIPPED, PART OF OR THE ENTIRE SECOND LAYER MAY BE OMITTED FROM THE LOAD SHOWN PAGE 30. HOWEVER, THE LAST 2 LAYER LOAD UNIT MUST BE UNITIZED WITH PIECES MARKED ⑤ AND ⑥ AS SHOWN IN THE LOAD ON PAGE 30.



SIDE FILL ASSEMBLY B

SEE SPECIAL NOTE 3 AT RIGHT.

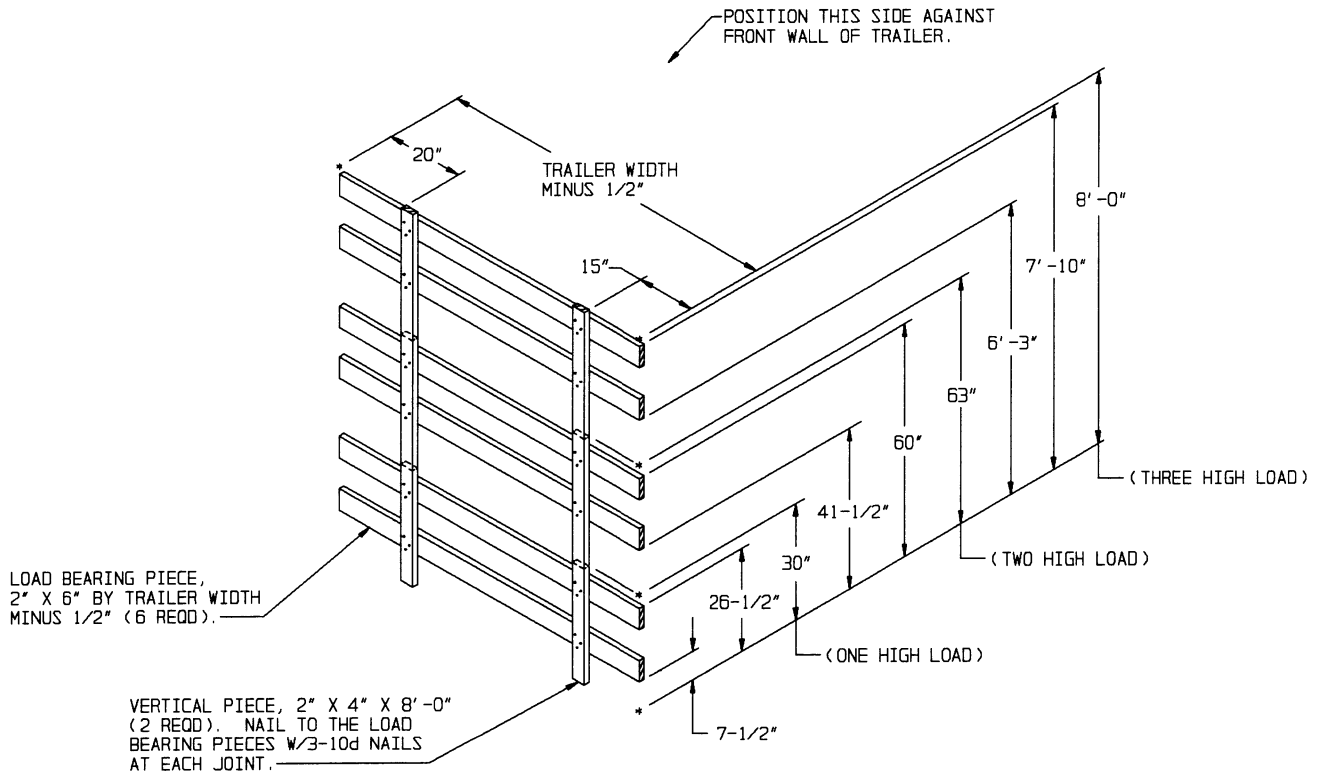


SIDE FILL ASSEMBLY C

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	15	10
2" X 6"	137	137
NAILS	NO. REQD	POUNDS
10d (3")	212	3-1/4
STEEL STRAPPING, 1-1/4" -- 748' REQD --- 107 LBS		
SEAL FOR 1-1/4" STRAPPING -- 32 REQD --- 1-1/2 LBS		

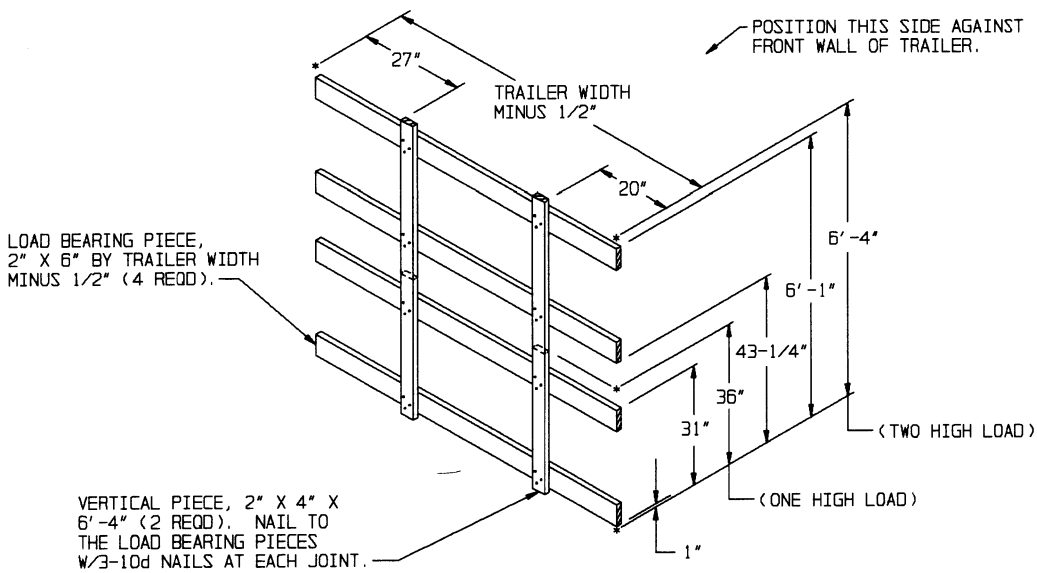
LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
80-GALLON DRUM (PALLETIZED)	30	14,760 LBS
DUNNAGE		406 LBS
TOTAL WEIGHT		15,166 LBS (APPROX)



FORWARD GATE ASSEMBLY A

THIS GATE IS FOR USE WITH 55-GALLON METAL DRUM.

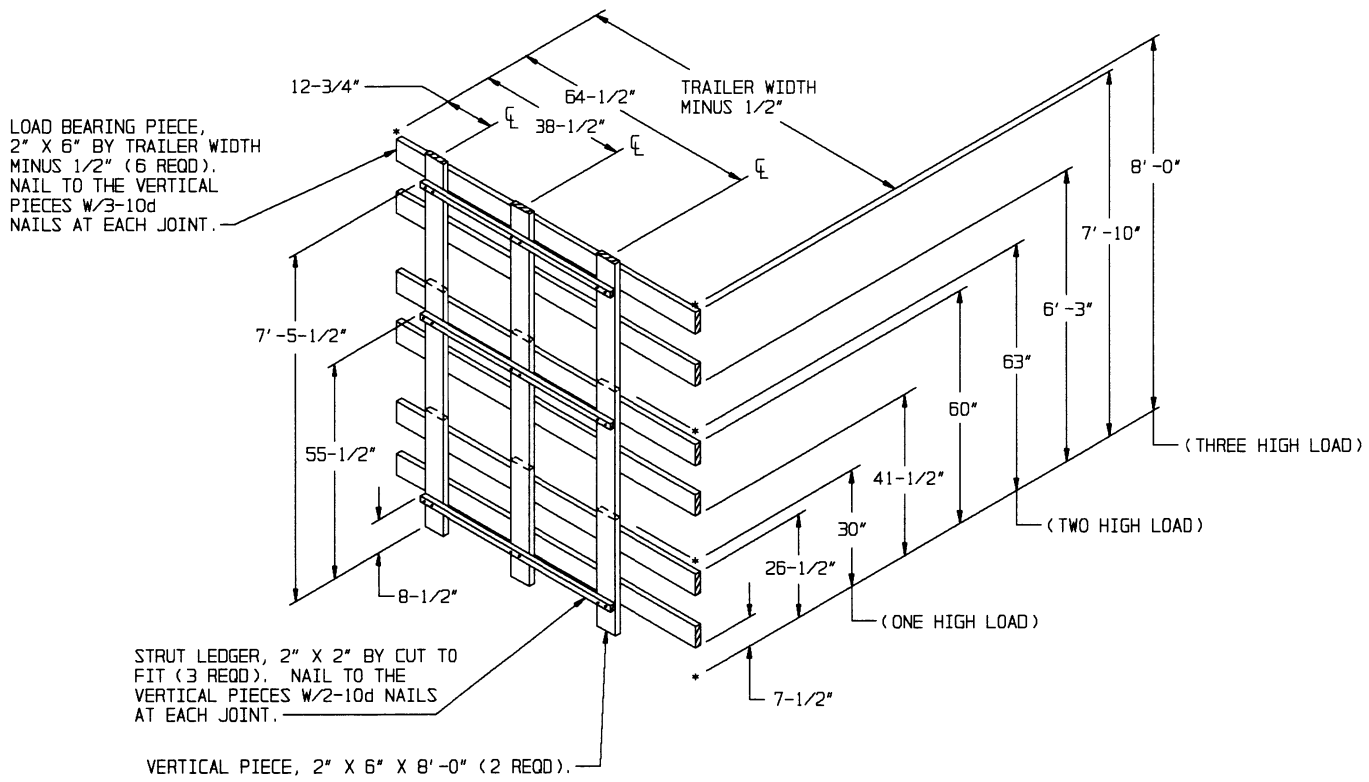


FORWARD GATE ASSEMBLY B

THIS GATE IS FOR USE WITH THE 80-GALLON METAL DRUM.

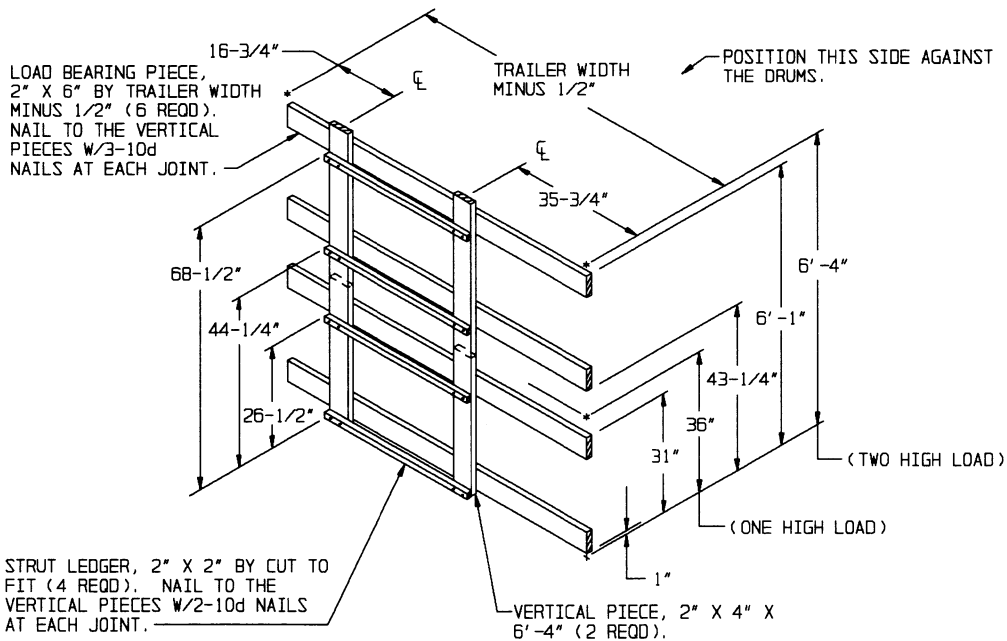
DETAILS

POSITION THIS SIDE AGAINST THE DRUMS.



REAR GATE ASSEMBLY A

THIS GATE IS FOR USE WITH 55-GALLON METAL DRUM.



REAR GATE ASSEMBLY B

THIS GATE IS FOR USE WITH THE 80-GALLON METAL DRUM.

NOTE ●:

THE 16-1/2" DIMENSION AND THE 19" DIMENSION ARE FOR USE IN A TRAILER HAVING AN INSIDE WIDTH OF 90". IF A WIDER OR NARROWER TRAILER IS BEING USED THE DISTANCE BETWEEN THE RISER PIECES MUST BE ADJUSTED.

TIE PIECE, 2" X 2" X 20-1/2" WHEN POSITIONED UNDER THE 55-GALLON DRUM AND 2" X 2" X 23" WHEN POSITIONED UNDER THE 80-GALLON DRUM. NAIL TO THE RISER PIECES W/2-10d NAILS AT EACH END. THESE DIMENSIONS ARE FOR USE IN A TRAILER HAVING AN INSIDE WIDTH OF 90". IF A WIDER OR NARROWER TRAILER IS BEING USED ADJUST THE LENGTH ACCORDINGLY.

TIE PIECE, 1" X 4" X 16-1/2" WHEN POSITIONED UNDER THE 55-GALLON DRUM AND 19" WHEN POSITIONED UNDER THE 80-GALLON DRUM (2 REOD). NAIL TO THE BOTTOM RISER PIECES W/2-6d NAILS AT EACH END AND NAIL TO FILL PIECE W/2-6d NAILS (CLINCH NAILS).

TOP RISER PIECE, 1" X 4" BY TRAILER WIDTH MINUS 1/2" (2 REOD). NAIL TO THE BOTTOM RISER PIECE W/7-6d NAILS (CLINCH NAILS).

TRAILER WIDTH MINUS 1/2"

TRAILER WIDTH MINUS 1/2"

RISER, 2" X 4" BY TRAILER WIDTH MINUS 3-1/2" (2 REOD).

THIS DIMENSION WILL BE 16-1/2" WHEN LOADING THE 55-GALLON DRUM AND 19" WHEN LOADING THE 80-GALLON DRUM. SEE "NOTE ●" ON THIS PAGE.

BOTTOM RISER PIECE, 1" X 4" BY TRAILER WIDTH MINUS 1/2" (2 REOD).

THIS DIMENSION WILL BE 16-1/2" WHEN LOADING THE 55-GALLON DRUM AND 19" WHEN LOADING THE 80-GALLON DRUM. SEE "NOTE ●" ON THIS PAGE.

FILL PIECE, 1" X 4" BY CUT TO FIT (2 REOD).

RISER ASSEMBLY A

THIS RISER IS FOR USE WITH THE 55-GALLON METAL DRUM OR THE 80-GALLON METAL DRUM. IF THE 2" X 2" TIE PIECE SPLITS AT END WHEN NAILING OR IF DESIRED THE "ALTERNATIVE RISER ASSEMBLY" SHOWN AT LEFT MAY BE USED IN LIEU OF THE "RISER ASSEMBLY A" WHEN FABRICATING THIS RISER ASSEMBLY FIELD CHECK DIMENSIONS WITHIN THE LOAD TO ASSURE A FIT BETWEEN ROWS OF DRUMS.

ALTERNATIVE RISER ASSEMBLY

THIS RISER ASSEMBLY IS FOR USE WITH THE 55-GALLON METAL DRUM OR THE 80-GALLON METAL DRUM. IT MAY BE USED IN LIEU OF THE "RISER ASSEMBLY A" SHOWN AT THE RIGHT. WHEN FABRICATING THIS RISER ASSEMBLY FIELD CHECK DIMENSIONS WITHIN THE LOAD TO ASSURE A FIT BETWEEN ROWS OF DRUMS.

RETAINER PIECE, 2" X 4" BY TRAILER WIDTH MINUS 1/2" (1 REOD). NAIL TO THE SUPPORT PIECE W/7-10d NAILS.

TRAILER WIDTH MINUS 1/2"

SUPPORT PIECE, 2" X 4" BY TRAILER WIDTH MINUS 1/2" (1 REOD).

TIE PIECE, 2" X 4" X 19" (1 REOD).

DECK, 1" X 6" BY TRAILER WIDTH MINUS 1/2" (2 REOD). NAIL TO THE TIE PIECES W/3-6d NAILS AT EACH JOINT.

TIE PIECE, 2" X 2" X 19" (1 REOD).

TRAILER WIDTH MINUS 1/2"

34"

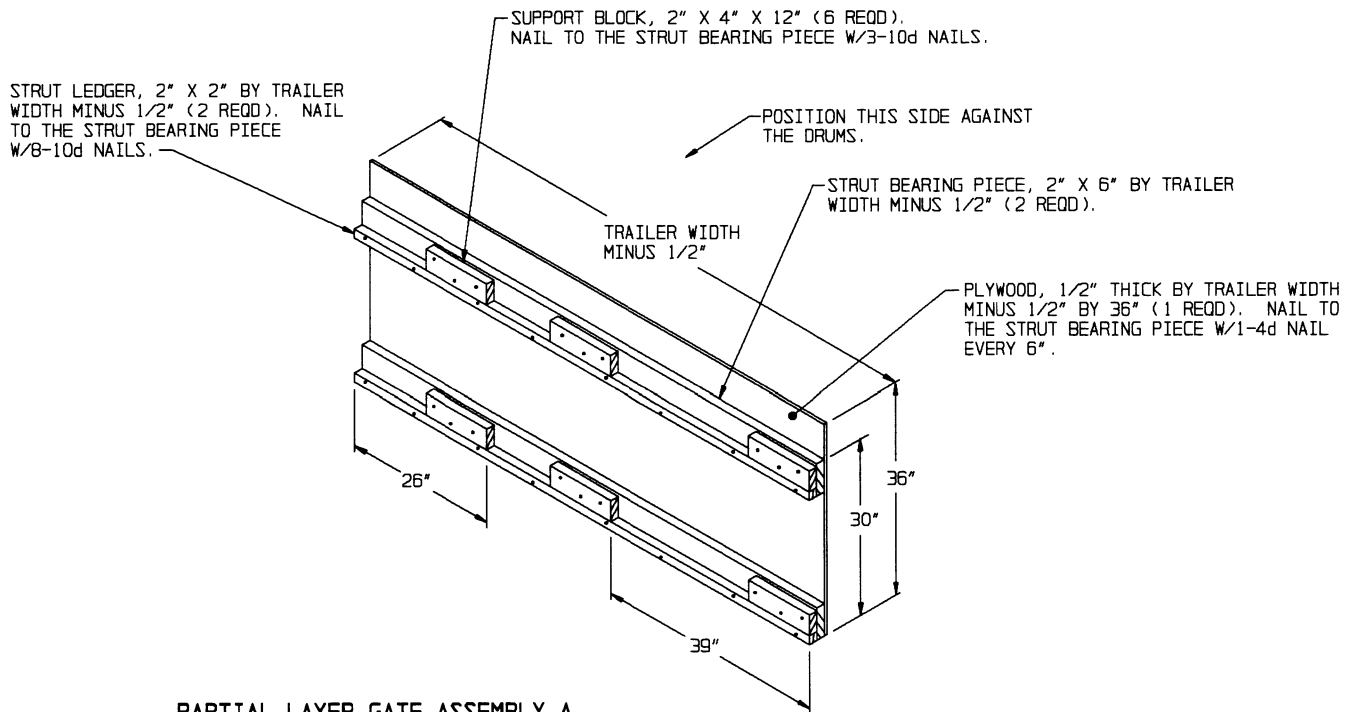
19"

DECK ASSEMBLY

THIS ASSEMBLY IS FOR USE WITH THE 80-GALLON DRUM. THE 19" DIMENSION IS FOR USE IN A TRAILER HAVING AN INSIDE WIDTH OF 90". IF A WIDER OR NARROWER TRAILER IS BEING USED THE LENGTH OF THE TIE PIECES AND THE DISTANCE BETWEEN THE DECK PIECES MUST BE ADJUSTED. SEE GENERAL NOTE "R" ON PAGE 2.

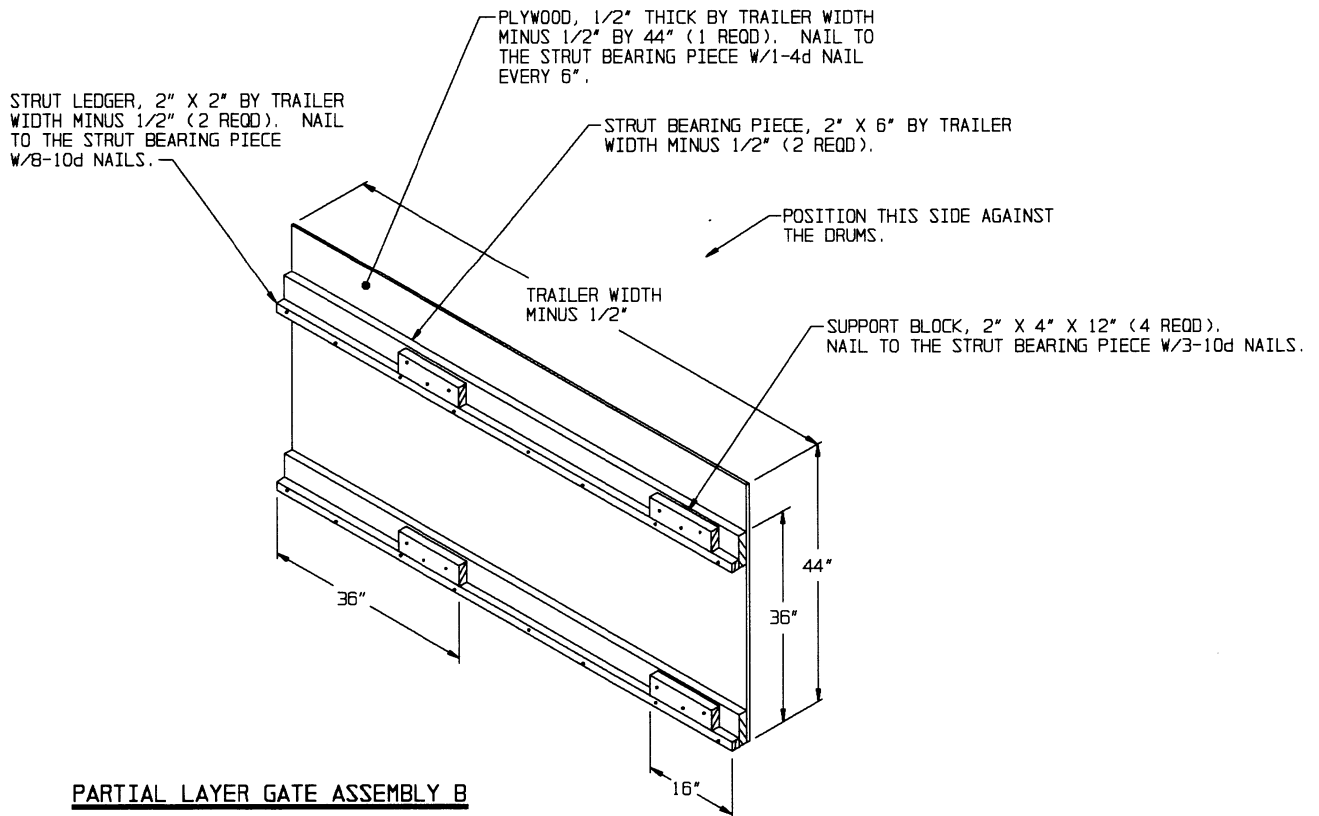
STRAPPING BOARD

THIS ASSEMBLY IS FOR USE WITH THE 80-GALLON DRUM WHEN LOADED TWO HIGH IN TRAILERS EQUIPPED WITH MECHANICAL BRACING DEVICES. SEE THE LOAD ON PAGE 26.



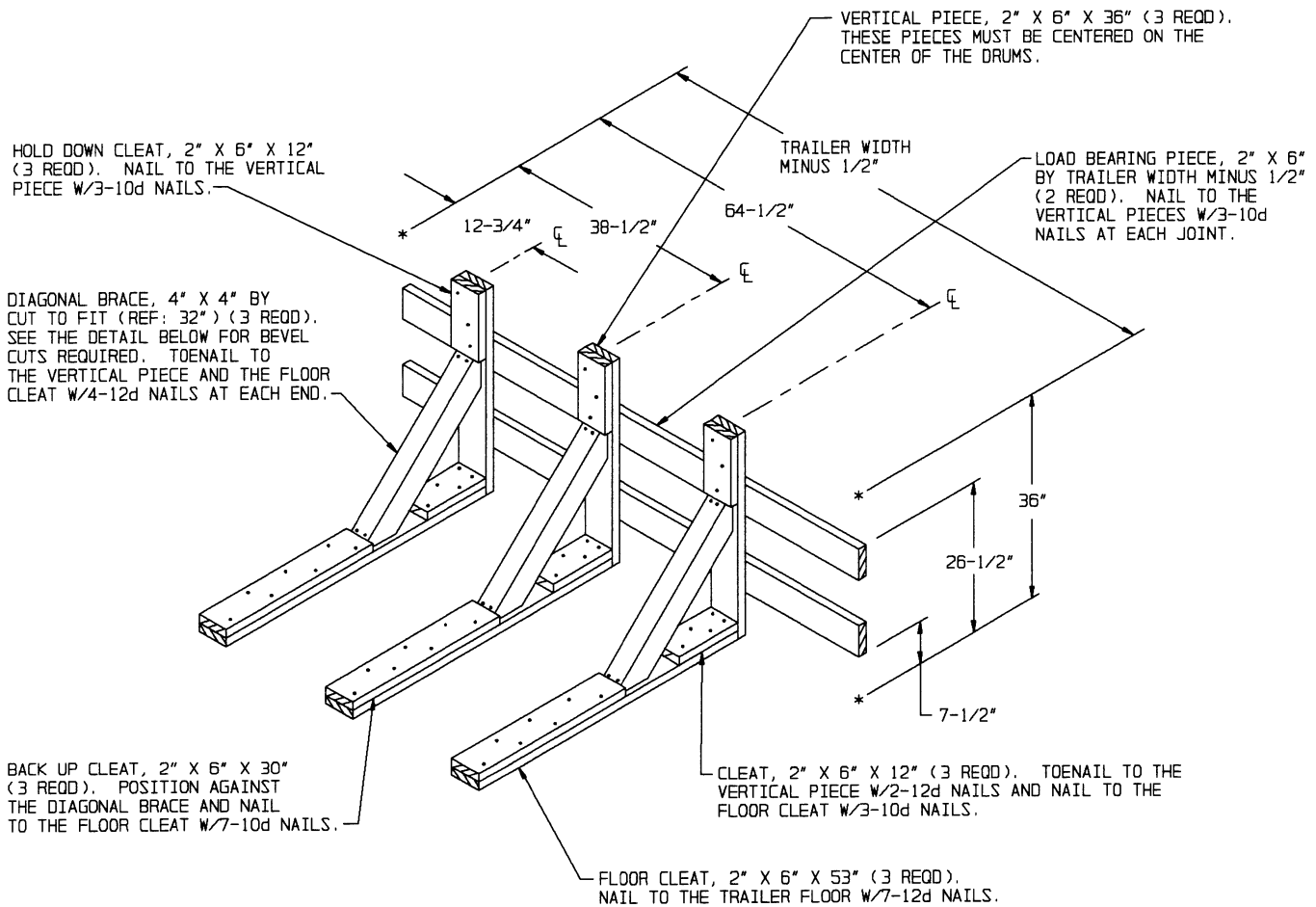
PARTIAL LAYER GATE ASSEMBLY A

THIS GATE IS FOR USE WITH THE 55-GALLON DRUM. SEE THE LOAD ON PAGE 6. NOTE: THE OPPOSITE GATE MUST BE FABRICATED TO "MATE" WITH THE GATE SHOWN ABOVE.



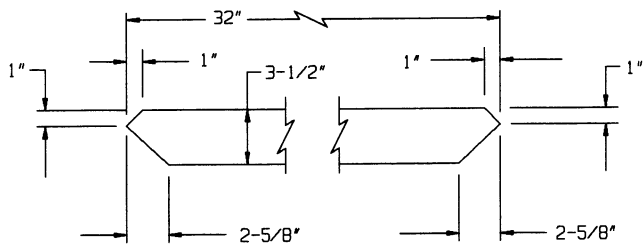
PARTIAL LAYER GATE ASSEMBLY B

THIS GATE IS FOR USE WITH THE 80-GALLON DRUM. SEE THE LOAD ON PAGE 20. NOTE: THE OPPOSITE GATE MUST BE FABRICATED TO "MATE" WITH THE GATE SHOWN ABOVE.



KNEE BRACE ASSEMBLY A

THIS KNEE BRACE IS FOR USE WITH THE 55-GALLON DRUM WHEN LOADED IN TRAILERS HAVING A NAILABLE FLOOR.



DIAGONAL BRACE
(4" X 4" MATERIAL)

HOLD DOWN CLEAT, 2" X 6" X 12"
(2 REQD). NAIL TO THE VERTICAL
PIECE W/3-10d NAILS.

DIAGONAL BRACE, 4" X 4" BY
CUT TO FIT (REF: 37-1/2") (2 REQD).
SEE THE DETAIL BELOW FOR BEVEL
CUTS REQUIRED. TOENAIL TO
THE VERTICAL PIECE AND THE FLOOR
CLEAT W/4-12d NAILS AT EACH END.

BACK UP CLEAT, 2" X 6" X 30"
(2 REQD). POSITION AGAINST
THE DIAGONAL BRACE AND NAIL
TO THE FLOOR CLEAT W/7-10d NAILS.

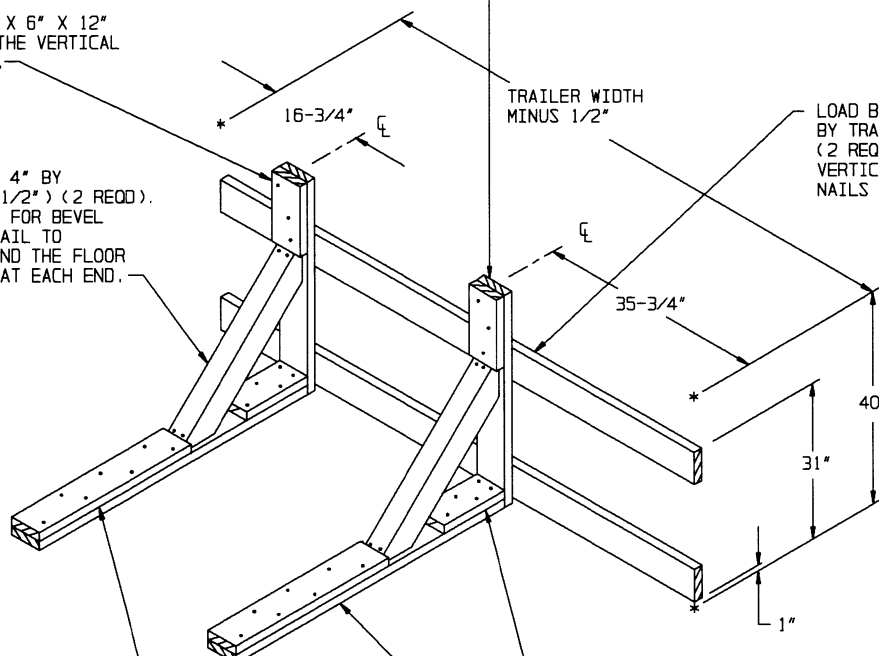
VERTICAL PIECE, 2" X 6" X 40" (2 REQD).
THESE PIECES MUST BE CENTERED ON THE
CENTER OF THE DRUMS.

TRAILER WIDTH
MINUS 1/2"

LOAD BEARING PIECE, 2" X 6"
BY TRAILER WIDTH MINUS 1/2"
(2 REQD). NAIL TO THE
VERTICAL PIECES W/3-10d
NAILS AT EACH JOINT.

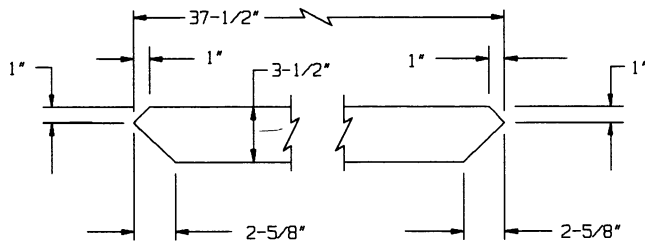
CLEAT, 2" X 6" X 12" (2 REQD). TOENAIL TO THE
VERTICAL PIECE W/2-12d NAILS AND NAIL TO THE
FLOOR CLEAT W/3-10d NAILS.

FLOOR CLEAT, 2" X 6" X 57" (2 REQD).
NAIL TO THE TRAILER FLOOR W/7-12d NAILS.



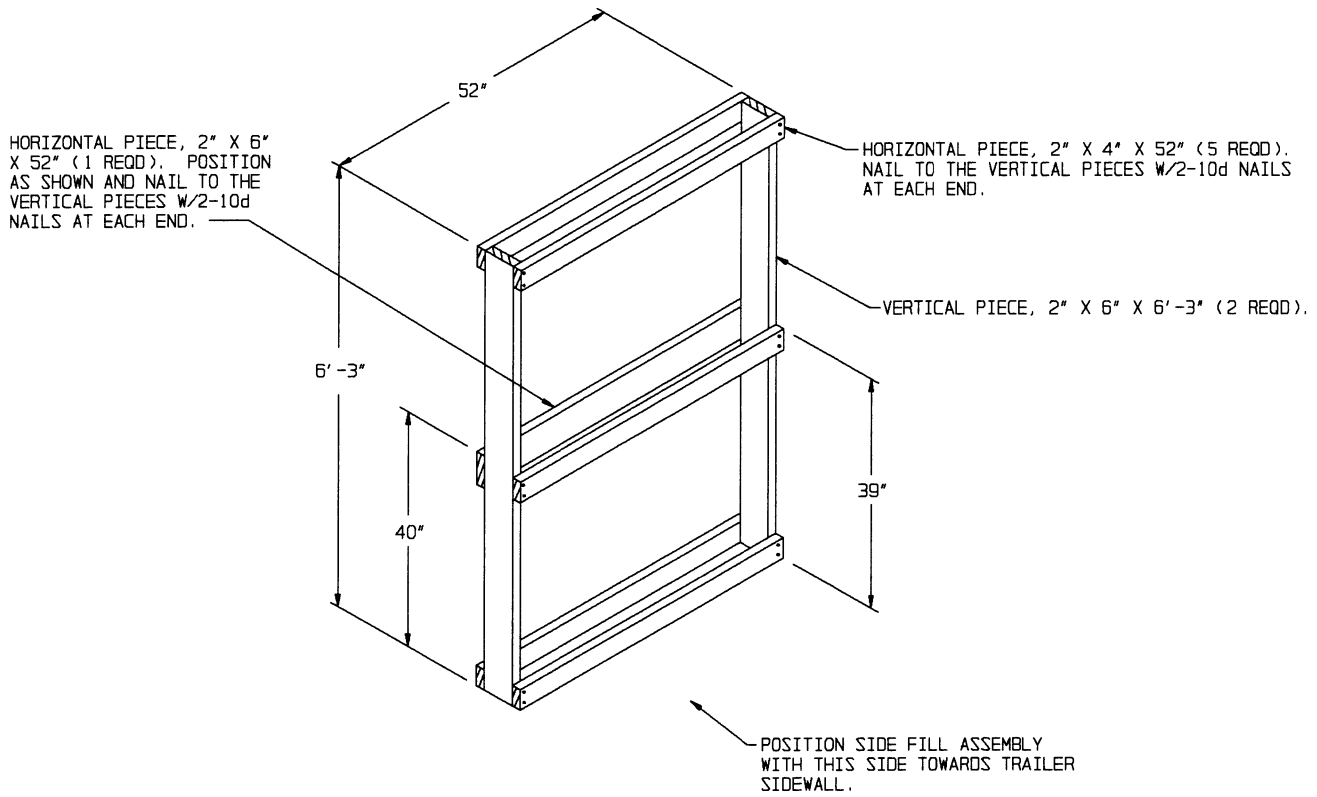
KNEE BRACE ASSEMBLY A

THIS KNEE BRACE IS FOR USE WITH THE 80-GALLON DRUM
WHEN LOADED IN TRAILERS HAVING A NAILABLE FLOOR.



DIAGONAL BRACE
(4" X 4" MATERIAL)

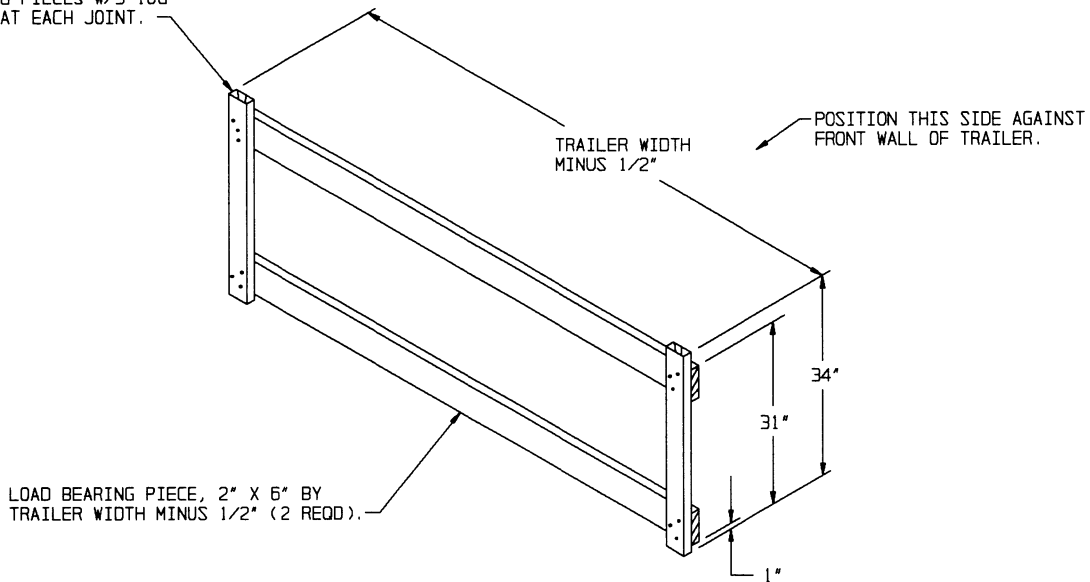
DETAILS



SIDE FILL ASSEMBLY A

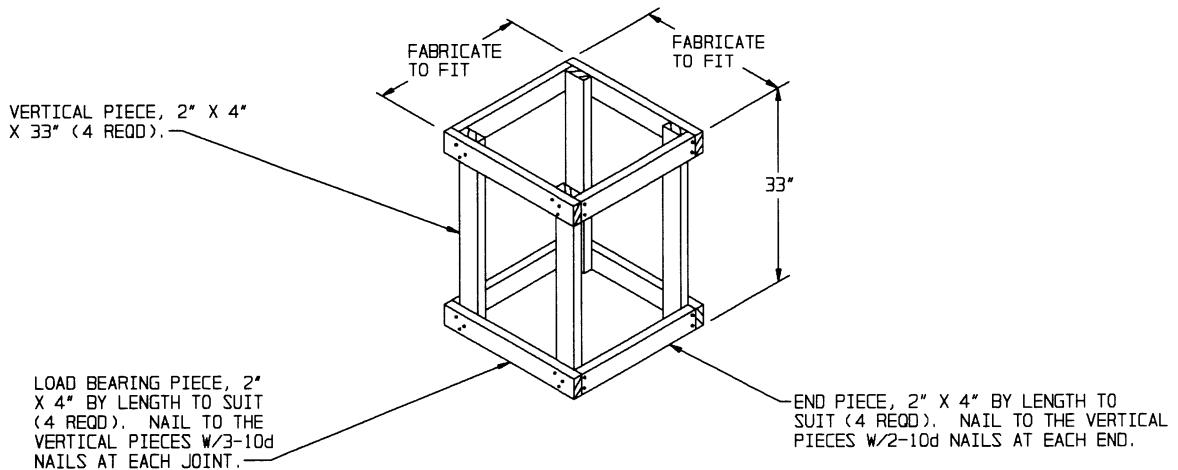
THIS ASSEMBLY IS FOR USE WITH THE PALLETIZED UNIT LOAD SHOWN ON PAGE 16. SEE SPECIAL NOTE 3 ON PAGE 17.

VERTICAL PIECE, 2" X 4" X 34"
(2 REQD). NAIL TO THE LOAD
BEARING PIECES W/3-10d
NAILS AT EACH JOINT.



FORWARD GATE ASSEMBLY C

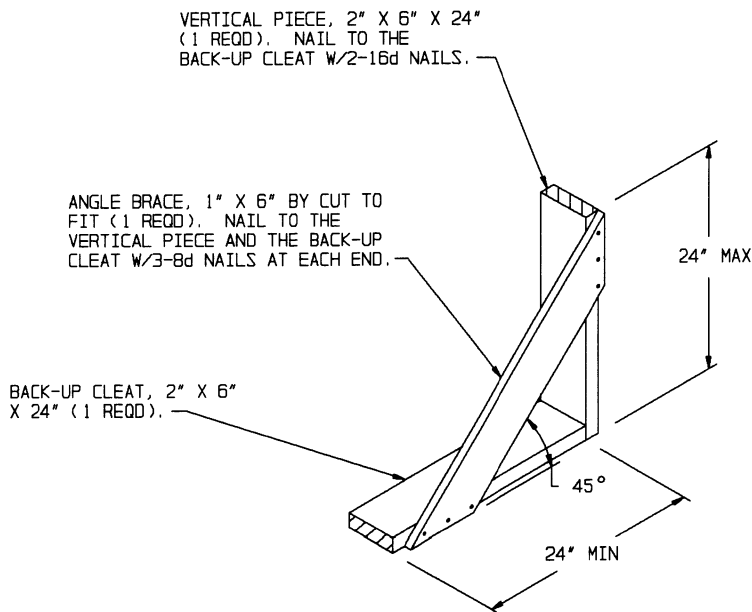
THIS GATE IS FOR USE WITH THE 80-GALLON DRUM WHEN
POSITIONED IN A LTL LOAD AS SHOWN ON PAGE 24.



OMITTED DRUM ASSEMBLY

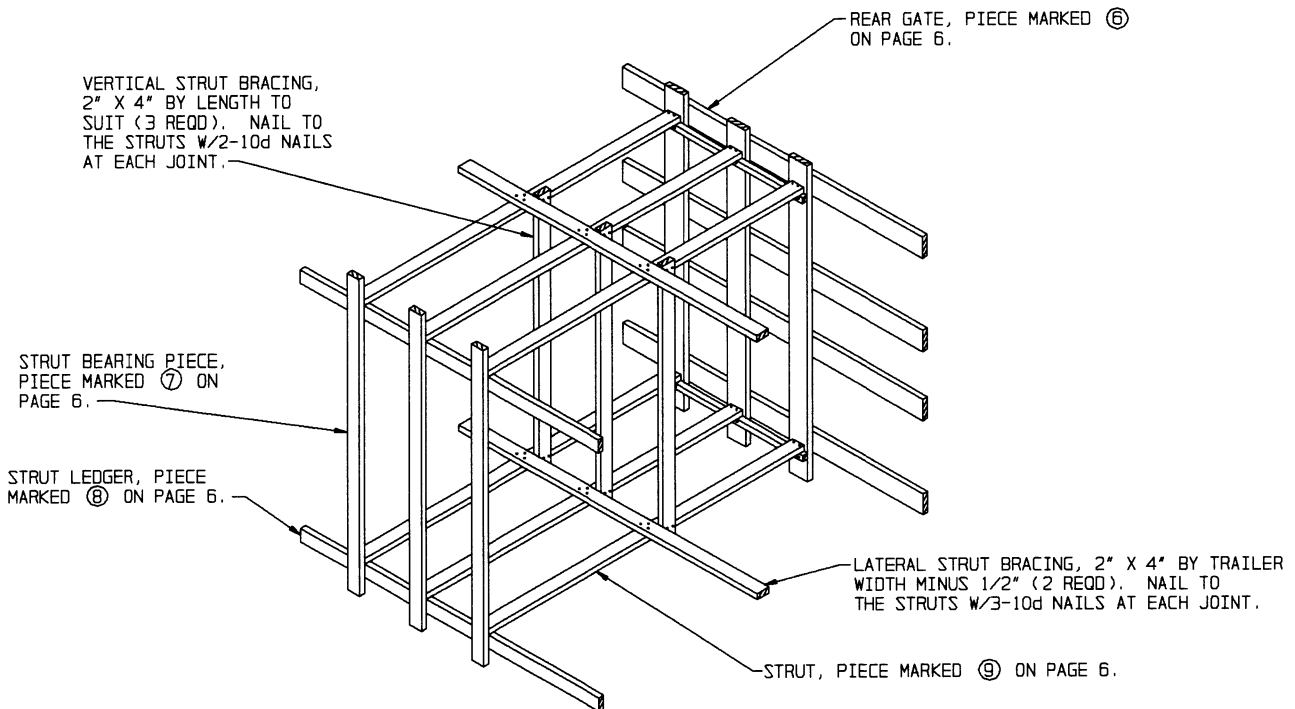
THIS ASSEMBLY IS FOR USE WITH THE 55-GALLON DRUM AS SHOWN
IN THE LOAD ON PAGE 14. THIS ASSEMBLY MAY BE USED IN A
ONE LAYER LOAD, THE SECOND LAYER OF A TWO LAYER LOAD, OR
THE THIRD LAYER OF A THREE LAYER LOAD. MORE THAN ONE
OMITTED DRUM ASSEMBLY MAY BE USED WITHIN A LOAD. THEY SHOULD
BE POSITIONED AT LEAST ONE ROW APART AND NEVER ADJACENT TO
EACH OTHER. WHEN FABRICATING THIS ASSEMBLY FIELD CHECK
DIMENSIONS WITHIN THE LOAD TO ASSURE A FIT.

DETAILS



LTL BRACE

THIS BRACE IS FOR USE WITH 55-GALLON DRUMS AS SHOWN IN
THE LOAD ON PAGE 10. EACH LTL BRACE AS APPLIED FOR
LONGITUDINAL BRACING WILL RETAIN 2,000 POUNDS.



STRUT BRACING

VERTICAL AND LATERAL STRUT BRACING IS REQUIRED
IF THE STRUTS ARE 8'-0" OR GREATER IN LENGTH.