# UNITIZATION PROCEDURES FOR STRYKER ARMOR TILE SET UNITIZED IN PALLET BOXES

# **PASSIVE TILES - FRONT**

DISTRIBUTION STATEMENT A:

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#### U.S. ARMY MATERIEL COMMAND DRAWING APPROVED, U.S. ARMY FIELD SUPPORT COMMAND CAUTION: VERIFY PRIOR TO USE AT WWW.DAC.ARMY.MIL THAT THIS IS THE MOST CURRENT VERSION OF THIS DOCUMENT. THIS IS PAGE 1 OF 6. DO NOT SCALE **JANUARY 2006** BASIC **LAURA A. FIEFFER** ENGINEER OR **TECHNICIAN** REV. SFSJM-LIT APPROVED BY ORDER OF COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND TRANSPORTATION ENGINEERING DIVISION CLASS DIVISION DRAWING FILE VALIDATION **ENGINEERING** DIVISION 4221/15 20PA1009 19 48 **ENGINEERING** DIRECTORATE U.S. ARMY DEFENSE AMMUNITION CENTER

#### **GENERAL NOTES**

- A. THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCOR-DANCE WITH AR 740-1, AND AUGMENTS TM 743-200-1 (CHAPTER 5) AND CONFORMS TO MIL-STD-1660.
- FOR DETAILS OF THE UPPER GLACIS LARGE (TOP AND BOTTOM) AND THE UPPER GLACIS L-BOX (TOP AND BOTTOM) FIBERBOARD **BOX SEE ARDEC DRAWING 13005866-2.**

BOX DIMENSIONS: 20-1/4" LONG X 5-11/16" WIDE X 17-1/2" HIGH BOX CUBE: 1.2 CUBIC FEET **BOX WEIGHT (ALL TYPES): 75 POUNDS** 

C. FOR DETAILS OF THE UPPER GLACIS SMALL (TOP AND BOTTOM) FIBERBOARD BOX SEE ARDEC DRAWING 13005866-3.

> BOX DIMENSIONS: 14-5/8" LONG X 5-11/16" WIDE X 17-1/2" HIGH BOX CUBE: 0.8 CUBIC FEET

**BOX WEIGHT (ALL TYPES): 60 POUNDS** 

D. THE FOLLOWING AMC DRAWINGS ARE APPLICABLE FOR OUTLOAD-ING AND STORAGE OF THE ITEMS COVERED BY THIS APPENDIX.

CARLOADING - - - - - - - 19-48-4115-5PA1002 TRUCKLOADING - - - - - - 19-46-4117-11PA1003 STORAGE - - - - - - 19-48-4118-1-2-3-4-14-22PA1002 END OPENING ISO CONTAINER - 19-48-4153-15PA1002 MILVAN - - - - - - - - 19-48-4166-15PA1003 SIDE OPENING ISO CONTAINER - 19-48-4267-15PA1009

- E. UNLESS OTHERWISE SPECIFIED, A MANUFACTURING TOLERANCE OF PLUS-OR-MINUS 1/4" IS ALLOWED ON ALL DIMENSIONS. HOW-EVER, SIMILAR PIECES IN AN ASSEMBLY MUST BE WITHIN 1/8" OF THE SAME DIMENSION.
- F. INSTALL EACH HORIZONTAL, LOAD OR TIEDOWN STRAP TO BE LO-CATED AS SHOWN. HORIZONTAL STRAPS MUST BE TENSIONED AND SEALED PRIOR TO THE APPLICATION OF TIEDOWN AND LOAD STRAPS. LOAD STRAPS MUST BE TENSIONED AND SEALED AFTER THE HORIZONTAL STRAPS AND PRIOR TO THE TIEDOWN STRAPS.
- G. WHEN APPLYING ANY STRAP, CARE MUST BE EXERCISED TO ASSURE THAT THE END OF THE STRAP ON THE UNDERSIDE OF THE JOINT EXTENDS AT LEAST 6" BEYOND THE SEAL. THIS EXTRA MINIMUM LENGTH OF STRAP IS REQUIRED TO PERMIT SUBSE-QUENT TIGHTENING OF LOOSENED STRAPPING. RETENSIONING CAN BE ACCOMPLISHED WITHOUT REPLACING STRAPPING OR SPLICING STRAPPING THROUGH THE USE OF A MANUAL OR PNEU-MATIC FEEDWHEEL TYPE TENSIONING TOOL AND THE APPLICA-TION OF ONE ADDITIONAL SEAL.
- H. IN ORDER TO OBTAIN COMPACT AND SOUND UNITS, ALL STRAPS SHALL BE LOCATED IN PROPER ALIGNMENT AND TENSIONED UN-TIL THEY CUT INTO THE EDGE OF THE PALLET BOX AND THE PAL-LET DECK. AFTER TENSIONING, ALL STRAPS WILL BE SECURED USING ONE SEAL AND TWO PAIR OF NOTCHES PER SEAL.
- CLIP-LOK™ BOXES, HARDBOARD, FIBERBOARD, AND PLYWOOD ARE MANUFACTURED WOOD AND THEREFORE DO NOT REQUIRE HEAT TREATMENT.
- K. UNIT LOAD MARKING MUST BE APPLIED IN ACCORDANCE WITH ARDEC DRAWING 13005865.
- ARMOR TILE BOXES MUST FIT SNUGLY WITHIN THE PALLET BOX. THE UNBLOCKED SPACE WITHIN THE PALLET BOX MUST NOT EX-CEED 1/2" IN ANY DIRECTION. FILLERS SUCH AS PLYWOOD, FIBER-BOARD, HONEYCOMB FILLER, FOAM CUSHIONING MATERIAL OR HARDBOARD SHALL BE ADDED AS REQUIRED TO OBTAIN A TIGHT PACK
- M. CONVERSION TO METRIC EQUIVALENTS: DIMENSIONS WITHIN THIS DOCUMENT ARE EXPRESSED IN INCHES, AND WEIGHTS ARE EX-PRESSED IN POUNDS. WHEN NECESSARY, THE METRIC EQUIVA-LENTS MAY BE COMPUTED ON THE BASIS OF ONE INCH EQUALS 25.4MM AND ONE POUND EQUALS 0.454 KG.

PALLET UNIT DATA			
ITEMS INCLUDED		●HAZARD	
NSN	DODIC	CLASS AND DIVISION	COMPAT- IBILITY GROUP
2540- 01-523-4520 01-523-4528 01-523-4529 01-523-4530 01-523-4532 01-523-4533	UNAS UNAS UNAS UNAS UNAS UNAS	INERT	

• HAZARD CLASSIFICATION DATA CONTAINED IN THE ABOVE CHART IS FOR GUIDANCE AND INFORMATIONAL PURPOSES ONLY. VERIFICATION OF THE SPECIFIED DATA SHOULD BE MADE BY CONSULTING THE MOST RECENT JOINT HAZARD CLASSIFICATION SYSTEM LISTING OR OTHER APPROVED LISTING(S).

#### **MATERIAL SPECIFICATIONS**

PALLET BOX - - - -:

CLIP-LOK™ REFERENCE NUMBER CL-13005863-3; CLIP-LOK SIMPAK™ USA,

COMMERCIAL ITEM DESCRIPTION A-A-PLYWOOD - - - - -:

COMMERCIAL TIEM 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.

STRAPPING, STEEL - -: ASTM D3953; FLAT STRAPPING, TYPE 1

HEAVY DUTY, FINISH B (GRADE 2), SIZE 3/4" OR 1-1/4" X .035" OR .031", NOTE: BRITE OR SLIT EDGES SHALL

HAVE FINISH A OVERLAY.

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

ISH: SIGNODE OR DELTA PAINTED SEALS MAY BE USED AS AN ALTERNATIVE IF ALL SURFACES ARE PAINTED. ING IS NOT PERMITTED. GRITTED BACK-

HARDBOARD - - - - -: ANSI/AHA A135.4, CLASS 1.

FIBERBOARD - - - -: ASTM D4727.

HONEYCOMB FILLER - -: FIBERBOARD, FACING PAPER WEIGHT 69

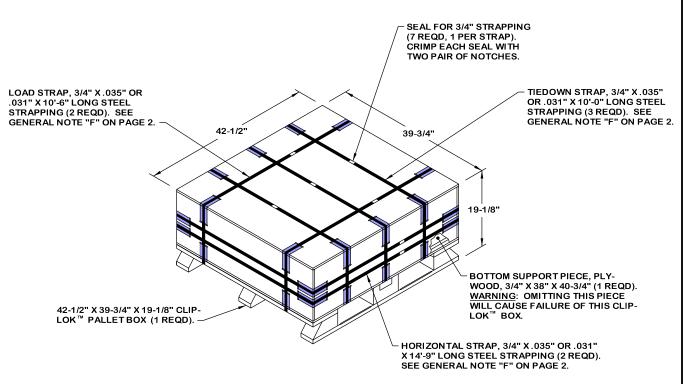
POUNDS/1, 000 SQUARE FEET, CORE PAPER WEIGHT 33 POUNDS/1, 000 SQUARE FEET, 1/2" CORE CELL CENTERS, PACTIV COR-PORATION (OR EQUAL).

FOAM CUSHIONING

COMMERCIAL ITEM DESCRIPTION A-A-59136, CLASS 1, TYPE III, GRADE A, MATERIAL - - - - -:

OR COMMERCIAL EQUIVALENT.

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### **PALLET UNIT**

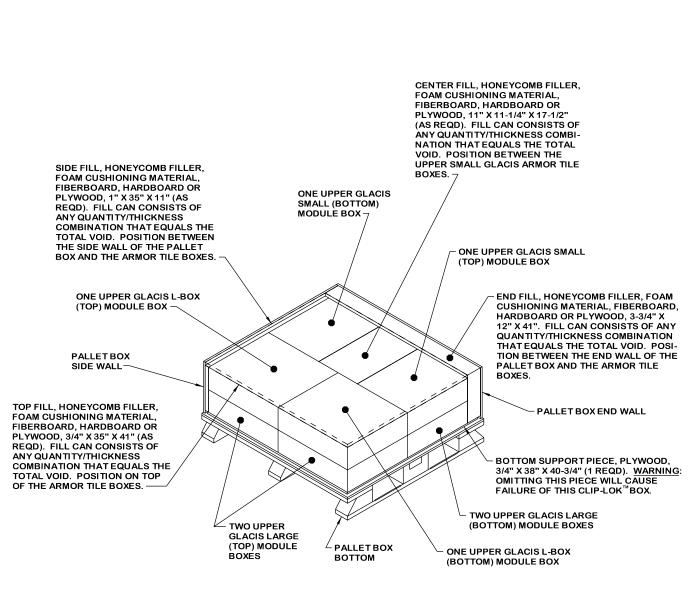
BILL OF MATERIAL				
PALLET BOX, CLIP-LOK $^{\text{TM}}$ 1 STEEL STRAPPING, $3/4"$ - 80.50' SEAL FOR $3/4"$ STRAPPING 7 FIBERBOARD, $3/4"$ 13.38 SQ FT HONEYCOMB, $1"$ 2.67 SQ FT HONEYCOMB, $3"$ 4.78 SQ FT HONEYCOMB, $4"$ 2.73 SQ FT	REQD 7.19 LBS REQD NIL REQD 1.67 LBS REQD 0.58 LBS REQD 3.09 LBS			

#### SPECIAL NOTES:

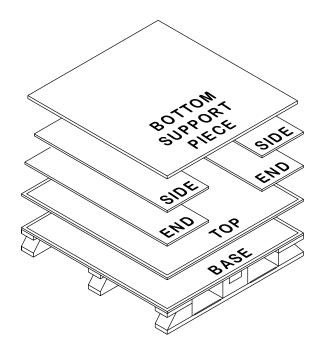
- 1. SOURCE OF SUPPLY: THE CLIP-LOK™ REFERENCE NUMBER CL-13005863-3 HAS BEEN APPROVED FOR USE. THIS PALLET BOX CAN BE OBTAINED FROM CLIP-LOK SIMPAK™ USA, INC., 1-800-448-CI IP
- 2. OTHER VENDERS' PALLET BOXES MAY BE QUALIFIED FOR USE BY SUBMITTING SAMPLE BOXES TO THE DEFENSE AMMUNITION CENTER, 1 C TREE ROAD, MCALESTER, OK 74501-9053.

  CONTACT THE TACOM-ARDEC PACKAGING OFFICE, AMSTA-ARWEP-RP, TELEPHONE 309-782-8205, E-MAIL WEP-R@RIA. ARMY.MIL, OR THE DAC TRANSPORTATION ENGINEERING DIVISION, SJMACDET, TELEPHONE 918-420-8927, E-MAIL SJMAC-DET@DAC.ARMY.MIL.

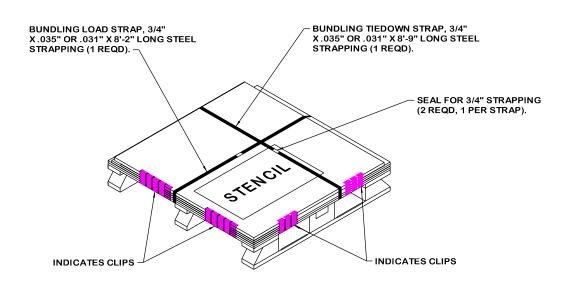
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## PALLET UNIT INTERNAL DUNNAGE



# STACKING FOR COLLAPSED CLIP-LOK<sup>™</sup> BOX



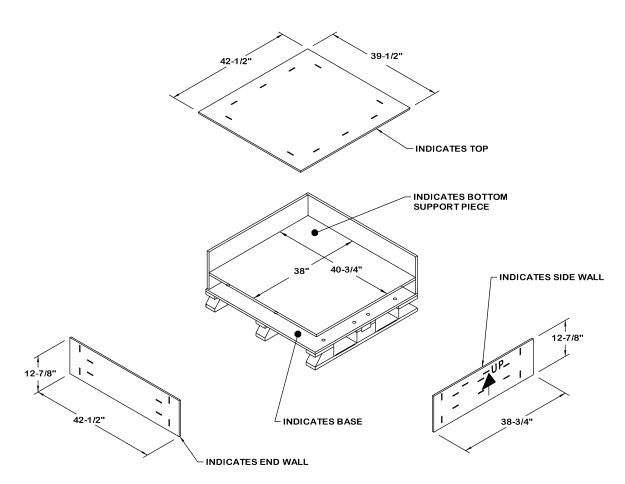
# **COLLAPSED BOX**

SEE THE STENCIL DETAIL ON PAGE 6. NOTE: IF CLIPS CANNOT BE SECURELY ATTACHED TO COLLAPSED BOX, PLACE INSIDE A PLASTIC BAG AND SECURE TO THE PALLET BOX BASE SKID WITH STAPLES.

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PROJECT CA 234/15-86

DRAWING 19-48-4221/15



# STENCIL (FOR APPLICATION TO BOTTOM SUPPORT PIECE)

# SPECIAL NOTES:

- THE DETAIL DEPICTED ABOVE WILL BE STENCILED ON THE BOTTOM SUPPORT PIECE TO SHOW ASSEMBLY INSTRUCTIONS. SEE THE "COLLAPSED BOX" DETAIL ON PAGE 5.
- 2. AN ARROW WITH UP WILL BE STENCILED ON THE SIDE PIECES AS SHOWN TO ENSURE THE STACKING SLOTS ARE ON TOP.

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