NOTES:

1. APPLICABLE STANDARDS/SPECIFICATIONS:
   A. DOD-STD-001OOD(AR)
   B. ANSI Y14.5M-1982

2. GENERAL:
   A. THIS DRAWING ESTABLISHES THE MINIMUM PAINTING REQUIREMENTS FOR CHEMICAL AGENT RESISTANT COATINGS (CARC) AND COMMERCIAL COATINGS FOR VEHICLES.
   B. UNLESS OTHERWISE SPECIFIED, THE FINISHING PROCESSES AND MATERIALS SHALL BE SELECTED BY THE CONTRACTOR AS SPECIFIED ON THIS DRAWING AND WILL BE SELECTED FROM THE APPLICABLE STATED METHOD(S). THE CONTRACTOR IS RESPONSIBLE TO ASSURE THAT THE SELECTED MATERIALS USED IN THE COATING SYSTEM ARE COMPATIBLE.
   C. PAINT FINISHES:
      BASIC PAINT FINISHES SHALL MEET THE REQUIREMENTS OF MIL-STD-193 FOR STEEL, ALUMINUM, AND NON-FERROUS METALS.
   D. SURFACES NOT TO BE PAINTED:
      UNLESS OTHERWISE SPECIFIED PAINTING MAY NOT BE REQUIRED ON CERTAIN TYPES OF SURFACES SUCH AS FABRICS, PLASTICS, RUBBER, GLASS, AND METAL PARTS NOT REQUIRING CORROSION PROTECTION OR WHERE PAINT INTERFERES WITH FUNCTION, AND SURFACES SPECIFICALLY INTENDED FOR ELECTRICAL CONTACT, HEAT TRANSMISSION, OR TIGHT TOLERANCE. SURFACES NOT PAINTED SHALL BE TREATED TO PROVIDE A NON-REFLECTIVE SURFACE, UNLESS THE SURFACE IS NOT VISIBLE WHEN VIEWING THE VEHICLE'S EXTERIOR IN A NORMAL OPERATING CONDITION.
   E. THE USE OF SILICON BASED PRODUCTS FOR LUBRICATION OR SURFACE COATING IS PROHIBITED WITHOUT PRIOR APPROVAL IN WRITING FROM THE VEHICLE MANUFACTURER AND CONTRACTING OFFICER.

3. APPLICATION:
   A. PREPARATION OF SURFACE:
      UNLESS OTHERWISE SPECIFIED, PRIOR TO ANY TREATMENT OR PAINTING, ALL SURFACES SHALL BE FREE OF ALL SOIL IMPURITIES, CORROSION, GREASE, OIL, SOLDER FLUX, WELDING FLUX, WELD SPATTER, SAND, RUST, SCALE, OR OTHER FOREIGN MATTER THAT INTERFERES WITH THE COATING SYSTEM. CLEANING SHALL BE DONE IMMEDIATELY BEFORE ANY TREATMENT OR PAINTING. PRECAUTIONS SHALL BE TAKEN TO ENSURE THAT SURFACES REMAIN CLEAN AND DRY UNTIL THEY ARE TREATED OR PAINTED. THE USE OF UNINHIBITED ALKALINE MATERIAL, SUCH AS SODIUM HYDROXIDE SOLUTION, OR ABRASIVES, SUCH AS IRON OXIDE ROUGE, OR STEEL WOOL, THAT ACCELERATE CORROSION OF ALUMINUM ALLOY SURFACES IS PROHIBITED.
   B. PAINT APPLICATION:
      PRE-TREATMENT, PRIMER AND TOPCOAT SHALL BE APPLIED IAW MANUFACTURER'S INSTRUCTIONS FOR MIXING, APPLICATION AND CURING TO MAXIMIZE COATING QUALITY.
   C. TIME OF APPLICATION:
      PRIMER SHALL BE APPLIED PROMPTLY AFTER PRE TREATMENT AND CLEANING, NOT TO EXCEED 24 HOURS AFTER THE SURFACE HAS BEEN PREPARED FOR PAINTING EXCLUDING ALUMINUM AND ALUMINUM ALLOYS TREATED IAW MIL-C-5541. TOPCOAT SHALL BE APPLIED TO PRIMER IAW PRIMER SPECIFICATION REQUIREMENTS.

4. HEALTH, SAFETY AND ENVIRONMENTAL REGULATIONS:
   A. PAINT QUALIFICATION:
      THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL APPLICABLE ENVIRONMENTAL REGULATIONS FOR THE STATED PROCESS. WHEN IT IS NECESSARY TO MODIFY THE CERTIFIED PAINT, SUBJECT PAINT WILL BE RE-QUALIFIED. THE ACTIVITY RESPONSIBLE FOR THE CARC QUALIFIED PRODUCT LIST IS THE U.S. ARMY BELVOIR RESEARCH AND DEVELOPMENT CENTER, ATTN:STRBE-VO, FORT BELVOIR, VA 22060.
   B. HIGH TEMPERATURE PAINT:
      SURFACES ATTAINING AN OPERATING TEMPERATURE OF 400°F OR GREATER MUST BE PAINTED WITH HEAT RESISTANT PAINT IAW COATING REQUIREMENT METHOD 6.

5. APPLICABLE COATING COLOR CHIP NUMBERS REFERENCED FOR THE STATED COATING METHODS ON THIS REQUIREMENT SHALL BE IAW FED-STD-595.

6. ONE(1) mil = 1/1000 IN. (1.0 mil = 0.001 IN.)

METHODS:

METHOD 1: IRON AND STEEL SURFACES REQUIRING A POLYURETHANE TOPCOAT WITH AN E-COAT PRIMER FOR EXTERIOR AND/OR INTERIOR EXPOSURE.

CLEAN: IAW TT-C-490, METHOD OPTIONAL.
PRETREAT: IAW TT-C-490, TYPE I
OPTIONAL: IAW TT-C-490, TYPE III, IAW DOD-P-15328. DRY FILM THICKNESS IAW MIL-STD-193.
PRIMER: IAW MIL-P-53084 DRY FILM THICKNESS 0.8 - 1.5 mil.
OPTIONAL: IAW GM9984070, OR GM9984017 COLOR SEMIGLOSS GRAY OR BLACK.
TOPCOAT: IAW MIL-C-46168 OR MIL-C-53039 DRY FILM THICKNESS IAW MIL-STD-193. COLOR #34094 LUSTERLESS #383 GREEN

METHOD 2: ALUMINUM AND ALUMINUM ALLOY SURFACES REQUIRING A POLYURETHANE TOPCOAT WITH AN E-COAT PRIMER FOR EXTERIOR AND/OR INTERIOR EXPOSURE.

CLEAN AND TREAT: IAW MIL-C-5541
OPTIONAL ANODIZE: IAW MIL-A-8625
PRIMER: IAW MIL-P-53084 DRY FILM THICKNESS 0.8-1.5 mil.
OPTIONAL: IAW GM9984070, OR GM9984017 COLOR SEMIGLOSS GRAY OR BLACK.
TOPCOAT: IAW MIL-C-46168 OR MIL-C-53039. DRY FILM THICKNESS IAW MIL-STD-193. COLOR #34094 LUSTERLESS #383 GREEN.

METHOD 3: ALUMINUM AND ALUMINUM ALLOY SURFACES WITH AN E-COAT PRIMER NOT REQUIRING A POLYURETHANE TOPCOAT.

CLEAN AND TREAT: IAW MIL-P-53084
OPTIONAL ANODIZE: IAW MIL-A-8625
PRIMER: IAW MIL-P-53084 DRY FILM THICKNESS 0.8-1.5 mil.
OPTIONAL: IAW GM9984070, OR GM9984017 COLOR SEMIGLOSS GRAY OR BLACK.

METHOD 4: IRON AND STEEL SURFACES REQUIRING A POLYURETHANE TOPCOAT WITH A NON E-COAT PRIMER FOR EXTERIOR AND INTERIOR EXPOSURE.

CLEAN: IAW TT-C-490, METHOD OPTIONAL.
PRETREAT: IAW TT-C-490, TYPE I
OPTIONAL: IAW TT-C-490, TYPE III, IAW DOD-P-15328. DRY FILM THICKNESS IAW MIL-STD-193.
PRIMER: IAW MIL-P-53022, MIL-P-52192 OR MIL-P-53030 DRY FILM THICKNESS IAW MIL-STD-193 COLOR #27875 SEMIGLOSS WHITE
TOPCOAT: IAW MIL-C-46168 OR MIL-C-53039 DRY FILM THICKNESS IAW MIL-STD-193. COLOR #34094 LUSTERLESS #383 GREEN

METHOD 5: GALVANIZED STEEL SURFACES REQUIRING A POLYURETHANE TOPCOAT FOR EXTERIOR AND INTERIOR EXPOSURE.

CLEAN: IAW TT-C-490, METHOD OPTIONAL.
PRETREAT: IAW TT-C-490, TYPE I
PRIMER: IAW MIL-P-53084 DRY FILM THICKNESS 0.8-1.5 mil.
OPTIONAL: IAW GM9984070, OR GM9984017 COLOR SEMIGLOSS WHITE, GRAY OR BLACK.
TOPCOAT: PAINT MIL-C-46168 OR MIL-C-53039. DRY FILM THICKNESS IAW MIL-STD-193. COLOR #34094 LUSTERLESS #383 GREEN.

METHOD 6: IRON, STEEL AND ALUMINUM SURFACES REQUIRING A HEAT-RESISTING COATING THAT EXPERIENCE TEMPERATURES OF 400° F. OR GREATER.

TOPCOAT: IAW PAINT MIL-P-14105 DRY FILM THICKNESS IAW MIL-STD-193. COLOR #34094 LUSTERLESS #383 GREEN OR #37030 LUSTERLESS BLACK.

METHOD 7: SURFACES THAT DO NOT REQUIRE A POLYURETHANE TOPCOAT BUT MUST HAVE A PROTECTIVE CORROSION RESISTANT FINISH FOR INTERIOR AND EXTERIOR EXPOSURE.

FINISH: THE COMPONENT SHALL BE CORROSION RESISTANT TO HIGH HUMIDITY, SALT SPRAY, ROAD DE-ICING CHEMICALS AND ATMOSPHERIC CONTAMINATION. NO PERFORATION OR OTHER DAMAGE CAUSED BY CORROSION SHALL REQUIRE REPAIR OR REPLACEMENT OF PARTS. THE CORROSION PREVENTION METHOD SHALL NOT REQUIRE ACTIONS (BEYOND THE NORMAL WASHING AND REPLACEMENT OF DAMAGED FINISH) TO KEEP THE CORROSION PREVENTION IN EFFECT. THE COLOR OF THE FINISH IS OPTIONAL OR WITHIN THE SPECIFICATION OF THE COMPONENT. THIS WILL INSURE MATERIAL/FINISH TO TEN (10) YEARS IN A MILITARY ENVIRONMENT.

APPLICATION: IAW BEST COMMERCIAL/PAINT MANUFACTURER'S METHOD COLOR OPTIONAL: #34094 LUSTERLESS #383 GREEN OR #37030 LUSTERLESS BLACK ARE PREFERRED.

METHOD 8: THIS METHOD INTENTIONALLY LEFT BLANK.

METHOD 9: POLYURETHANE TOPCOAT SURFACES REQUIRING A NON-SLIP COATING FOR EXTERIOR AND INTERIOR EXPOSURE.

TOPCOAT: IAW MIL-C-53039 WITH SHERWIN-WILLIAMS P/N X90A54377 GRIT MIX RATIO 1 POUND PER GALLON DRY FILM THICKNESS IAW MIL-C-53072 COLOR FS 34094 LUSTERLESS 383 GREEN.

METHOD 10: ALUMINUM AND ALUMINUM ALLOY VESSELS REQUIRING A POLYURETHANE TOPCOAT WITH A NON E-COAT PRIMER FOR EXTERIOR AND INTERIOR EXPOSURE.

CLEAN AND CONDITION FOR INTERIOR SURFACES: IAW MIL-C-10578.
CLEAN AND PRETREAT FOR EXTERIOR SURFACES: IAW MIL-C-5541, MIL-A-8625 IAW TT-C-490 TYPE III, IAW DOD-P-15328 DRY FILM THICKNESS IAW MIL-STD-193.
PRIMER: IAW MIL-P-53022 OR MIL-P-53030 DRY FILM THICKNESS IAW MIL-STD-193. COLOR #27875 SEMIGLOSS WHITE.
TOPCOAT: IAW MIL-STD-193 USE PAINT MIL-C-46168 OR MIL-C-53039. DRY FILM THICKNESS IAW MIL-STD-193. COLOR #34094 LUSTERLESS #383 GREEN.

METHOD 11: ALUMINUM AND ALUMINUM ALLOY SURFACES REQUIRING A POLYURETHANE TOPCOAT WITH A NON E-COAT PRIMER FOR INTERIOR EXPOSURE.

CLEAN AND TREAT: IAW MIL-C-5541
OPTIONAL ANODIZE: IAW MIL-A-8625
PRIMER: IAW MIL-P-53022 OR MIL-P-53030. DRY FILM THICKNESS IAW MIL-STD-193. COLOR #27875 SEMIGLOSS WHITE.
TOPCOAT: IAW MIL-C-22750, TYPE I. DRY FILM THICKNESS IAW MIL-STD-193. COLOR #24533 SEMIGLOSS GREEN.

METHOD 12: POLYURETHANE TOPCOAT SURFACES REQUIRING LETTER AND NUMBER MARKINGS FOR EXTERIOR EXPOSURE.

TOPCOAT: IAW MIL-C-46168 OR MIL-C-53039. DRY FILM THICKNESS IAW MIL-STD-193. COLOR #37030 LUSTERLESS BLACK WHEN APPLIED ON COLOR #34094 LUSTERLESS #383 GREEN BASE COAT, OR COLOR #30051 LUSTERLESS #383 BROWN WHEN APPLIED ON LUSTERLESS BLACK CAMOUFLAGED AREA.

METHOD 13: COMPOSITE AND/OR PLASTIC SURFACES REQUIRING A POLYURETHANE TOPCOAT ONLY FOR EXTERIOR AND INTERIOR EXPOSURE.

CLEAN: IAW TT-C-490, METHOD OPTIONAL, OR IAW MIL-C-62419
TOPCOAT: IAW MIL-C-46168 OR MIL-C-53039. DRY FILM THICKNESS IAW MIL-STD-193. COLOR #34094 LUSTERLESS #383 GREEN.

METHOD 14: ALUMINUM AND ALUMINUM ALLOY SURFACES FOR INTERIOR EXPOSURE THAT ARE TO BE ADHESIVELY BONDED AND REQUIRE A NON E-COAT PRIMER AND AN EPOXY TOPCOAT.

CLEAN AND PRETREAT: IAW ASTM E864 AND E866.
OPTIONAL: IAW MIL-C-53072 AND DOD-P-15328
OPTIONAL: IAW MIL-C-5541
OPTIONAL: IAW MIL-A-8625
PRIME: IAW MIL-P-23377 OR MIL-P-53030 DRY FILM THICKNESS IAW MIL-STD-193.
TOPCOAT: IAW MIL-C-22750. DRY FILM THICKNESS IAW MIL-STD-193. COLOR #24533 SEMIGLOSS GREEN.

METHOD 15: ALUMINUM AND ALUMINUM ALLOY SURFACES FOR EXTERIOR EXPOSURE THAT ARE TO BE ADHESIVELY BONDED AND REQUIRE A NON E-COAT PRIMER AND A POLYURETHANE TOPCOAT.

CLEAN AND PRETREAT: IAW ASTM E864 AND E866.
OPTIONAL: IAW MIL-C-53072 AND DOD-P-15328
OPTIONAL: IAW MIL-C-5541
OPTIONAL: IAW MIL-A-8625
PRIME: IAW MIL-P-23377 OR MIL-P-53030. DRY FILM THICKNESS IAW MIL-STD-193.
TOPCOAT: IAW MIL-C-53072. USE PAINT MIL-C-46168 OR MIL-C-53039. DRY FILM THICKNESS IAW MIL-STD-193. COLOR #383 GREEN.

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
—	X0	(ZERO) INITIAL RELEASE - - ALLOCATED BASELINE -	—	—
	XA	(NOR # 3842-1)	93-05-25	
	-	(NOR # 4391-1) PRODUCT BASELINE ERR SSSR5902	94-03-28	
—	A	REVISED AND REDRAWN IAW ECP R5966R1 (PCA -0091)	96-11-27	C.VERM FML PDV
—	B	ADDED METHOD 14. ADDED METHOD 15. REVISED IAW ECP SSS-R6029	97-03-21	B.GRAY B C PDV
H3	C	CHANGED METHOD 9. ERR TACU7233	03-02-25	D.STANDISH FML SEW

DISTRIBUTION STATEMENT A:
APPROVED FOR PUBLIC RELEASE;
DISTRIBUTION IS UNLIMITED.

MECHANICAL PROPERTIES	
YP	
TS	
ELE	
RA	
BH	
RH	

PWIC N/A

NEXT ASSY	USED ON
	FMTV
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
1 PLACE ± ____ 2 PLACE ± ____
THIRD ANGLE PROJECTION

CONTRACT NUMBER DAAE07-92-C-R001
CONTRACTOR STEWART & STEVENSON SERVICES SEALY TEXAS U.S.A.

DRAWN BY G SCHMIDT	DATE (YR-MO-DA) 93-02-11	
CHECKER B.MARGOLIS	ENGINEER D.CHRISTENSEN	
DRAWING APPROVAL - GOV'T W. GRAY		
DESIGN APPROVAL - GOV'T P. MOTZENBECKER		
QA P. FIESTER	MAT'L ENGR T. BRUSTER	

DESIGN ACTIVITY
U.S. ARMY, TANK AUTOMOTIVE COMMAND
WARREN, MICHIGAN 48397-5000

TREATMENT AND FINISH REQUIREMENTS FMTV

SIZE	CAGE CODE	DWG NO
E	19207	12420325

SCALE NONE UNIT WT ____ SHEET ____

FILE NAME 03250E5 TACOM-E-METRIC

FML-02-25-10:15:54