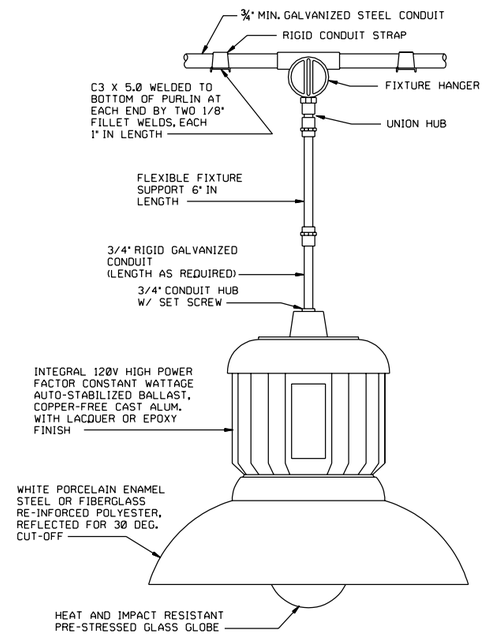
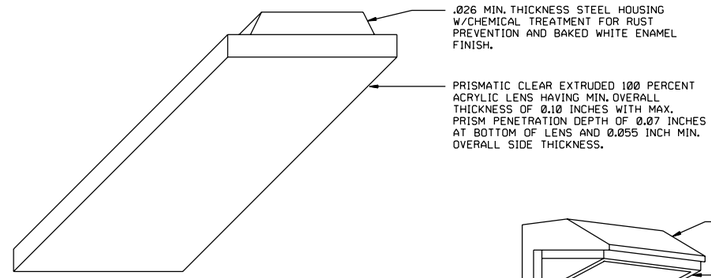


DETAIL A
FIXTURE TYPE "A" AND "A1" MOUNTING DETAIL

NO SCALE

NOTES:

1. LUMINAIRE SHALL COMPLY WITH UL 844 FOR CLASS I, DIVISION I, GROUP D (T2D-419 F) HAZARDOUS LOCATIONS.
2. ALL JOINTS SHALL BE THREADED TYPE.
3. FIXTURE SHALL HAVE INTERNAL PROVISIONS FOR GROUNDING.
4. FIXTURE "A1" SHALL HAVE AN ADDITIONAL 150W QUARTZ HOT RESTRIKE CAPABILITY.

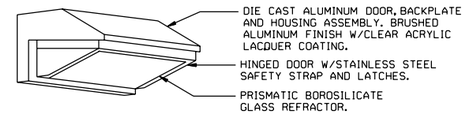


DETAIL B
FIXTURE TYPE "B" & "B1"

NO SCALE

NOTES:

1. ENTIRE HOUSING SHALL BE PAINTED WHITE. HOUSING SHALL NOT PERMANENTLY DEFORM NOR SHALL IT DEFLECT MORE THAN 1" WHEN LIFTED BY ONE CORNER.
2. HOUSING ENDS SHALL BE SECURED BY RIVETS OR SCREWS. PROVIDE A KNOCKOUT IN EACH END AND TWO IN THE TOP OF HOUSING.
3. THE LENS SHALL FORM A 5-SIDED BASKET WITH WELDED END PLATES. LENS SHALL HAVE HINGE ALONG ENTIRE LENGTH OF FIXTURE AND SHALL BE LIFT AND SHIFT TYPE.
4. BALLAST SHALL BE UL LISTED, CLASS P, WITH SOUND RATING OF "A".
5. FIXTURE SHALL HAVE INTERNAL PROVISIONS FOR GROUNDING.
6. FIXTURE B1 IS THE SAME AS B EXCEPT THAT IT INCLUDES BATTERY BACKUP.

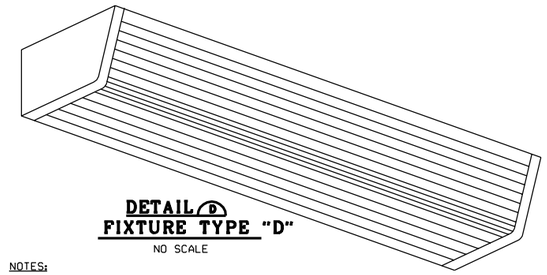


DETAIL C
FIXTURE TYPE "C"

NO SCALE

NOTES:

1. PROVIDE ANODIZED ALUMINIM REFLECTOR AND ADJUSTABLE MOGUL BASE GLAZED PORCELAN LAMPHOLDER, PREWIRED.
2. PROVIDE CAST KNOCKOUTS FOR RECESSED BOX MOUNTING.
3. FIXTURE SHALL HAVE INTERNAL PROVISIONS FOR GROUNDING.
4. FIXTURE SHALL CONFORM TO UL 1572 AND FOR WET LOCATIONS.
5. PROVIDE 120V HIGH POWER TYPE BALLAST FOR OPERATION AT AMBIENT TEMPERATURES FROM MINUS 20 DEGREES TO 105 DEGREES F.

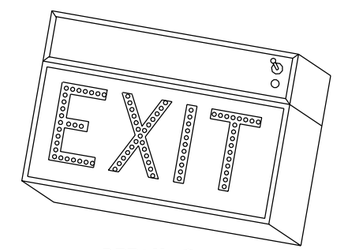


DETAIL D
FIXTURE TYPE "D"

NO SCALE

NOTES:

1. FIXTURE SHALL CONFORM TO UL 1570.
2. HOUSING SHALL BE OF DIE FORMED COLD ROLLED STEEL HAVING A MONIMAL THICKNESS OF NOT LESS THAN 0.030 INCH. THE BACK HOUSING SHALL BE ONE PIECE, SOLID ALONG ITS ENTIRE LENGTH. END PLATES SHALL BE DIE FORMED STEEL AND SHALL BE FASTENED SECURELY TO THE HOUSING IN A MANNER THAT PERMITS NO LIGHT LEAKAGE.
3. ALL METAL PARTS SHALL RECEIVE A RUST INHIBITIVE COATING AND A BAKED WHITE ENAMEL FINISH COAT.
4. LENS SHALL BE PRISMATIC, ONE PIECE, 0.125 INCH NOMINAL THICKNESS, AND 100 PERCENT VIRGIN ACRYLIC. LENS SHALL BE ATTACHED TO THE HOUSING SO THERE IS NO LIGHT LEAKAGE. LENS SHALL BE HELD IN PLACE BY CONCEALED HINGES, BY REINFORCING RIBS ALONG THE EDGES, OR BY RESTING ON THE END PLATES.
5. FIXTURE SHALL BE PREWIRED.

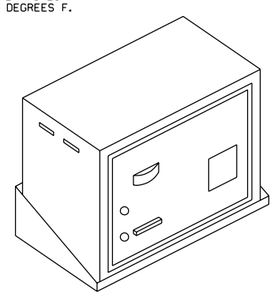


DETAIL F
FIXTURE TYPE "F"

NO SCALE

NOTES:

1. FIXTURE SHALL CONFORM TO UL 924 & NFPA 101.
2. HOUSING SHALL BE ALUMINUM OR STEEL.
3. FIXTURE SHALL HAVE MIN. OF 100 LIGHT EMITTING DIODES.
4. FACE PANEL SHALL BE MOLDED POLYCARBONATE PLASTIC OR GLASS, SHALL BE OF THE WHITE DIFFUSING TYPE SIMILAR TO OPAL OR ALBALITE, AND SHALL HAVE 6 INCH GREEN LETTERS WITH 3/4 INCH STROKE.
5. FIXTURE SHALL BE WALL MOUNTED.
6. FIXTURE SHALL HAVE AN AUTOMATIC SOLID STATE CHARGER AND A SEALED, RECHARGEABLE, MAINTENANCE FREE LEAD OXIDE OR NICKEL CADMIUM BATTERY. FIXTURE SHALL HAVE A LIGHT EMITTING DIODE PILOT LIGHT TO SHOW THAT THE BATTERY CHARGER IS FUNCTIONING. A TEST SWITCH TO SIMULATE A POWER FAILURE AND ALLOW CHECKING OF EMERGENCY BATTERY SYSTEM SHALL BE PROVIDED.
7. FIXTURE SHALL BE PREWIRED.

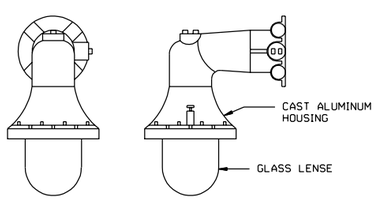


DETAIL G
FIXTURE TYPE "G"

NO SCALE

12 VOLT EMERGENCY BATTERY POWER SUPPLY UNIT

THE UNIT SHALL CONFORM TO UL 924. AND SHALL MEET OR EXCEED THE NFPA 70 TIME AND VOLTAGE REQUIREMENTS. THE UNIT SHALL BE DUAL-RATED FOR USE ON EITHER 120-VOLT OR 277-VOLT ALTERNATING CURRENT POWER SUPPLIES. FOLLOWING SUSTAINED LOSS OF THE NORMAL POWER SUPPLY, THE UNIT SHALL BE CAPABLE OF AUTOMATICALLY AND INSTANTANEOUSLY SUPPLYING AT LEAST 125 PERCENT OF THE FULL LOAD CURRENT OF THE QUANTITY AND WATTAGE RATING OF REMOTELY-MOUNTED FLOODLIGHTS INDICATED ON APPLICABLE CONTRACT DOCUMENTS. IT SHALL ALSO BE CAPABLE OF SUPPLYING 125 PERCENT OF THE FULL LOAD CURRENT OF THE FLOODLIGHTS FOR A PERIOD OF NOT LESS THAN 90 MINUTES, AND UNTIL THE BATTERY HAS BEEN DISCHARGED TO 87.5 PERCENT OF THE NOMINAL VOLTAGE RATING OF THE FLOODLIGHTS. A BATTERY LOW-VOLTAGE CUTOUT OR DISCONNECT FEATURE SHALL BE INCORPORATED INTO THE UNIT TO PROTECT THE BATTERY AGAINST DAMAGE IF THE BATTERY VOLTAGE DROPS BELOW 87.5 PERCENT OF THE NOMINAL VOLTAGE RATING OF THE BATTERY FLOODLIGHTS INDICATED ON APPLICABLE CONTRACT DOCUMENTS. THE BATTERY SHALL BE THE SEALED MAINTENANCE-FREE TYPE DESIGNED FOR 10 YEARS OF MAINTENANCE-FREE SERVICE, AND SHALL BE PROVIDED WITH HYDROMETER INDICATORS IF OF THE LEAD-CALCIUM TYPE CONTAINING A SULFURIC ACID ELECTROLYTE. THE BATTERY CHARGER SHALL BE CAPABLE OF FULLY RECHARGING THE BATTERY WITHIN 12 HOURS AFTER DISCHARGE TO 87.5 PERCENT OF THE NOMINAL BATTERY VOLTAGE. THE BATTERY CHARGER SHALL BE THE SOLID-STATE TYPE, AND SHALL PROVIDE A CONTINUOUS, VARIABLE, CURRENT-LIMITED, FILTERED AND REGULATED CHARGE RATE. BATTERY AND CHARGER SHALL BE CONTAINED IN A STEEL CABINET NOT LESS THAN 18 GUAGE IN THICKNESS WITH AN ENAMEL FINISH, UNLESS OTHERWISE APPROVED, AND SHALL HAVE AN ELECTROLYTE-RESISTANT UNDERCOAT IF A CORROSIVE ELECTROLYTE IS HOUSED IN THE BATTERY CASE. MOUNTING BRACKETS OR A MOUNTING SHELF SHALL BE PROVIDED FOR THE CABINET, COMPLETE WITH MOUNTING HARDWARE FINISHED TO MATCH THE CABINET. MOUNTING SLOTS FOR WALL OR SHELF MOUNTING SHALL BE PROVIDED, AS INDICATED ON APPLICABLE CONTRACT DOCUMENTS. THE CABINET SHALL HAVE SEPARATE BATTERY AND BATTERY-CHARGER COMPARTMENTS TO FACILITATE REMOVAL AND REPLACEMENT OF THOSE COMPONENTS, A HINGED ACCESS DOOR, AND PROVISIONS FOR TERMINATING AC AND DC CONDUCTORS AND CONDUITS. A LOAD RELAY WITH 30-AMPERE CONTACTS SHALL BE PROVIDED IN ADDITION TO THE NUMBER OF 10-20 AMPERE DISTRIBUTION CIRCUITS AS NECESSARY TO SUPPLY 125 PERCENT OF THE LOAD DEMANDS OF THE QUANTITY AND RATING OF THE REMOTELY-MOUNTED FLOODLIGHTS. THE UNIT SHALL BE PREWIRED AND SHALL BE EQUIPPED WITH A CHARGE-INDICATOR LIGHT, AND A PUSH-TO-TEST SWITCH AND SUITABLE METER TO INDICATE THE BATTERY VOLTAGE WHEN THE SWITCH IS CLOSED.



DETAIL H
FIXTURE TYPE "ER"

NO SCALE

NOTES:

1. FIXTURE SHALL COMPLY WITH UL 844 AND CONTAIN 1-25W, 12V LAMP.

COMPUTER AIDED DESIGN & DRAFTING

$$ - THINK VALUE ENGINEERING - $$

REVISIONS

SYMBOL	DESCRIPTIONS	DATE	APPROVED

ROBERT AND COMPANY
96 POPLAR ST., N.W.
ATLANTA, GA 30335

US ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
OMAHA, NE

AIR FORCE C.E. SUPPORT AGENCY
139 BARNES DRIVE, SUITE #1
TYNDALL AFB, FL 32403-5319

DESIGNED BY: KEA
DRAWN BY: KEA
CHECKED BY: KKT
REVIEWED BY: RJB
SUBMITTED BY:
CHIEF: ELEC SECTION

AIR FORCE STANDARDS
PRESSURIZED HYDRANT FUELING SYSTEM
TYPE III

LIGHTING FIXTURE DETAILS

PLOT SCALE RATIO: 1:1
DESIGN FILE: SD18E102.DGN
DATE: REV. #1 NOV. 1998
SPEC. NO.: 78-24-28-88
DRAWING CODE: AW 78-24-28
SHEET REFERENCE NUMBER: E1.2