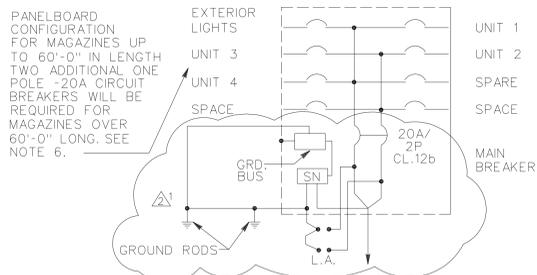


SITING PLAN
NOT TO SCALE

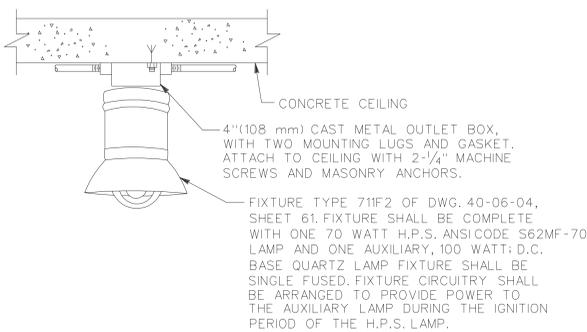
| CONNECTED LOAD PER UNIT | | | |
|-------------------------|----------|---------------------|---------------|
| LIGHTING (WATTS) | | RECEPTACLES (WATTS) | TOTAL (WATTS) |
| EXTERIOR | INTERIOR | | ① ② |
| 250 | 806 | 200 | 1256 |

- ① ASSUMING A 60 FT. (1829) MAGAZINE
- ② MAX. LOAD - 4 BAYS - 90 FT. (2745) MAGAZINE - 2.81 KVA

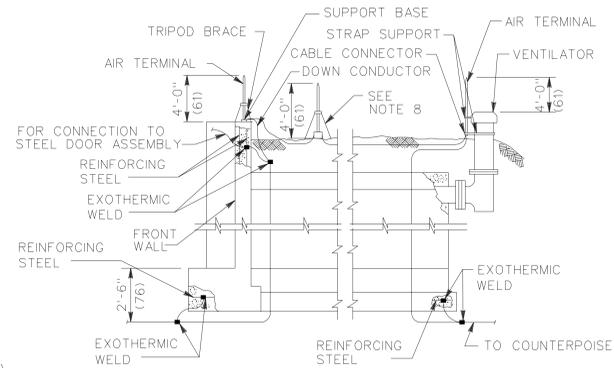


LIGHTING PANELBOARD
SCHEMATIC

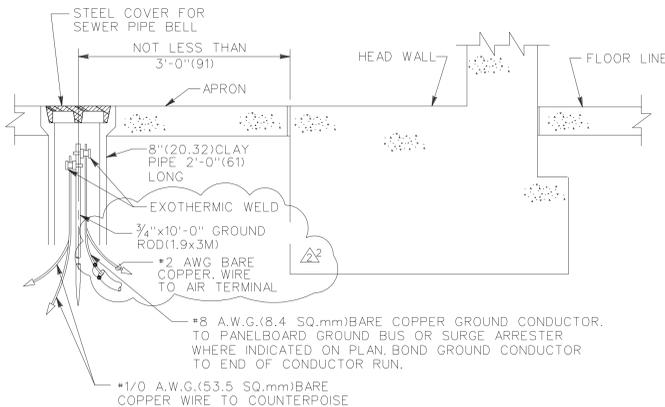
120/240V.-10-3W. WITH GROUND BUS SURFACE MOUNTED IN WEATHERPROOF ENCLOSURE WITH A MAINS. ALL C/B'S RATED 20A-1P, CL. 12a EXCEPT AS NOTED OTHERWISE. SOLID NEUTRAL BUS SHALL BE CONNECTED TO THE GROUND BUS ONLY IN THE PANELBOARD. BOND PANELBOARD ENCLOSURE TO GROUND BUS.



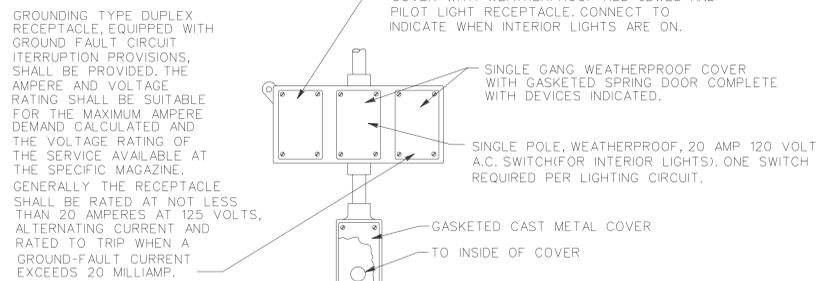
DETAIL 1
NOT TO SCALE



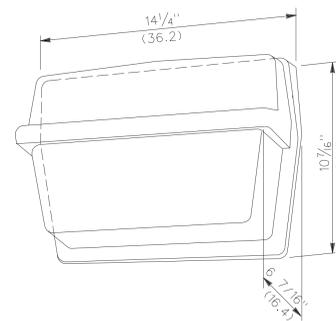
DETAIL 2
NOT TO SCALE



DETAIL 3
NOT TO SCALE



DETAIL 4
NOT TO SCALE



FIXTURE TYPE WBTH-414
(SEE NOTE 10)

WEATHERPROOF INCANDESCENT WALL MOUNTING FIXTURE CONSISTING OF A THERMAL, SHOCK-RESISTING, CRYSTAL PRISMATIC GLASS, ASYMMETRIC ALZAK REFLECTOR AND A DIECAST ALUMINUM HOUSING. THE FIXTURE SHALL BE PREWIRED AND EQUIPPED WITH A DOUBLE CONTACT BAYONET-BASE SOCKET FOR A 250 WATT IODINE-QUARTZ, SINGLE ENDED LAMP. THE FIXTURE SHALL BE SUITABLE FOR MOUNTING DIRECTLY ON A WALL WITH CONDUIT ENTRY ON EACH SIDE OR TO A RECESSED OUTLET BOX STUD.

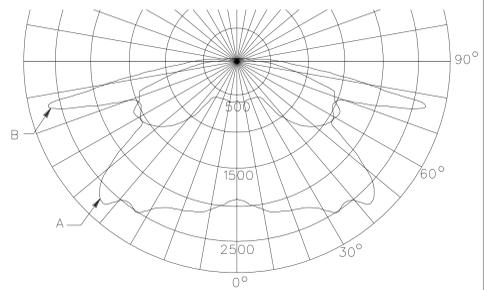
THE FIXTURE SHALL REQUIRE NO TOOLS FOR LAMP REPLACEMENT.

THE CANDLEPOWER VALUES INDICATED ARE TO BE CONSIDERED MINIMUM VALUES OBTAINED WITH STANDARD LAMPS AT RATED VOLTAGE.

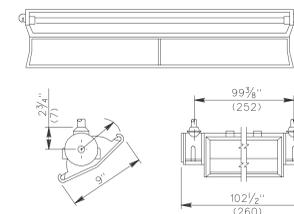
PHOTOMETRIC DISTRIBUTION
STANDARD FIXTURE POSITION

A - LATERAL DISTRIBUTION IN 77° CONE
B - VERTICAL DISTRIBUTION THROUGH 45° LATERAL

LAMP : 250 Q/CL QUARTZ IODINE
LUMENS : 5000
WATTS : 250
BULB : T-4
VOLTS : 120
TEST DISTANCE : 25 FEET (762)



| DISTRIBUTION DATA | | |
|-------------------|------|------|
| ANGLE DEGREES | A | B |
| 0 | 1900 | 480 |
| 5 | 1945 | 540 |
| 10 | 1985 | 540 |
| 15 | 2190 | 535 |
| 20 | - | 560 |
| 25 | 2255 | 560 |
| 30 | - | 565 |
| 35 | 2550 | 580 |
| 40 | 2500 | 770 |
| 45 | 2715 | 1150 |
| 50 | 2460 | 1325 |
| 55 | 1965 | 1425 |
| 60 | 1550 | 1550 |
| 65 | 1610 | 1475 |
| 70 | 1435 | 1500 |
| 75 | 1435 | 2450 |
| 77 | - | 2715 |
| 80 | 920 | 2020 |
| 85 | 720 | 770 |
| 90 | 425 | 440 |
| 95 | 315 | 310 |
| 105 | 160 | 220 |
| 115 | 110 | - |
| 125 | 80 | - |
| 135 | 50 | - |
| 145 | 30 | - |
| 155 | 20 | - |
| 165 | 10 | - |
| 175 | 10 | - |
| 180 | 10 | - |



FIXTURE TYPE WBF-SL-96
(SEE NOTE 10)

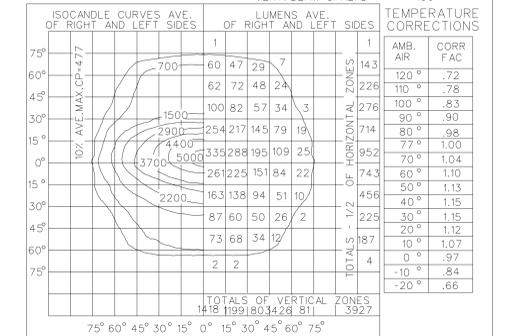
FLUORESCENT FLOODLIGHT FIXTURE SUITABLE FOR OUTDOOR INSTALLATION SHALL UTILIZE A 96 INCH (244) RAPID START 1500 MA LAMP (F96T12/CW/SHO). THE FIXTURE SHALL CONSIST OF AN ALZAK ALUMINUM REFLECTOR WITH SPECULAR FINISH, SPRING LOADED PLUNGER TYPE SILVERPLATED CONTACT SOCKETS WITH NEOPRENE BOOTS AND SHALL HAVE PROVISION FOR AIMING THROUGHOUT 360 DEGREES ROTATION WITH GRADUATED AIMING DIAL. DOOR ASSEMBLY SHALL CONSIST OF A STAINLESS STEEL FRAME WITH A CLEAR ACRYLIC PLASTIC COVER, SPONGE NEOPRENE WEATHERPROOF GASKET WITH STAINLESS STEEL HINGES AND LATCHES. HOUSING SHALL BE FINISHED WITH GREEN ACRYLIC BAKED ENAMEL PAINT OR OTHER APPROVED COLOR. THE FIXTURE SHALL BE EQUIPPED WITH A MOUNTING HUB ASSEMBLY AT EACH END. A THERMALLY PROTECTED WEATHERPROOF BALLAST, NOT INTEGRAL WITH THE FIXTURE SHALL BE PROVIDED. THE BALLAST SHALL BE RATED FOR -20° F (-29C) STARTING IN COLD WEATHER OPERATION. THE CANDLEPOWER VALUES INDICATED ARE TO BE CONSIDERED MINIMUM VALUES OBTAINED WITH STANDARD LAMPS AT RATED VOLTAGE.

NOMINAL LAMP DATA

LAMP : F96T12/CW/SHO
WATTS : 212
CURRENT : 1.5 AMPS
LUMENS : 13250
TEST DISTANCE : 40 FT. (-1220)

TEST RESULTS

AVG. MAX. CANDLEPOWER : 4779
BEAM LUMENS : 7854
BEAM EFFICIENCY : 59.3%
TOTAL EFFICIENCY : 62.1%
HOR. BEAM SPREAD : 160°
VERT. BEAM SPREAD : 136°



NOTE:
REFER TO SHEET E-1 FOR NOTES AND LEGEND.

| SYMBOL | DESCRIPTION | DATE | APPROVAL |
|--------|---------------------------------------|---------|----------|
| ⚡ | GENERAL REVISION/LIGHTNING PROTECTION | 11JUN98 | WLS |
| ⚠ | GENERAL REVISION/SIMONS-EASTERN CO. | 19JUL84 | JYM |

BLACK & VEATCH CONSULTING ENGINEERS KANSAS CITY, MISSOURI
DEPARTMENT OF THE ARMY OFFICE OF THE CHIEF OF ENGINEERS MILITARY CONSTRUCTION - ENGINEERING DIVISION WASHINGTON, D.C.

| | |
|-------------------------|--|
| DRAWN BY: S.M.C. | MAGAZINE, PRECAST CONCRETE, EARTH COVERED ELECTRICAL DETAILS |
| TRACED BY: S.M.C. | |
| CHECKED BY: N.J.A. | |
| SUBMITTED BY: W.V. HILL | |
| APPROVED BY: O.F.M. | APPROVED: LEE S. GARRETTE DATE: 11APR79 |
| CHIEF ADV. TECH. BR. | CHIEF ENGINEERING DIVISION MIL. PROGR., O.C.E. |
| APPROVED FOR: _____ | Design file no: 84225 File name: 6951e2.dgn |
| DATE: _____ | DRAWING NUMBER: 421-80-05 SHEET: E-2 |

CONSULTING ENGINEERS FALLS CHURCH, INDIANA