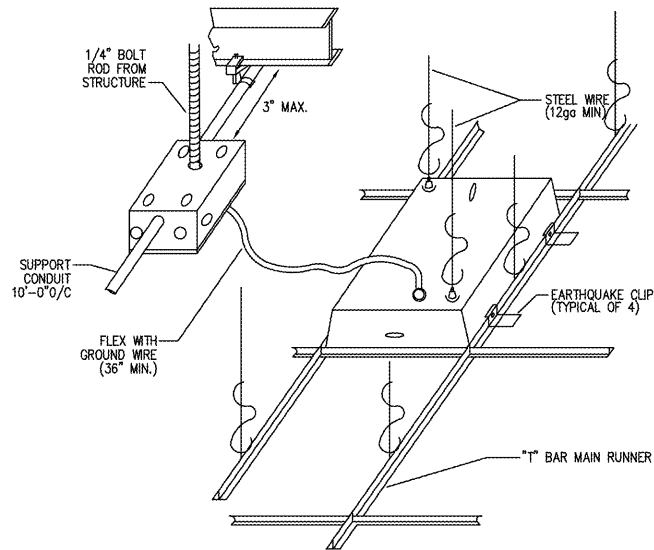


NOTES:

1. THIS DETAIL IS APPLICABLE WHEN CAPTAIN D'S IS MODIFYING AN EXISTING OR INSTALLING A NEW BUILDING SERVICE. IF MAIN BUILDING POWER SERVICE IS BY OTHERS, CONTRACTOR SHALL ENSURE GROUNDING SYSTEM INSTALLED BY OTHERS IS PER CODE.
2. GROUNDING ELECTRODE SYSTEM INSTALLATION SHALL BE IN STRICT COMPLIANCE WITH LOCAL CODES AND/OR AUTHORITIES HAVING JURISDICTION.
3. ALL GROUNDING ELECTRODE CONDUCTORS AND BONDING JUMPERS TO BE SIZED PER CODE.

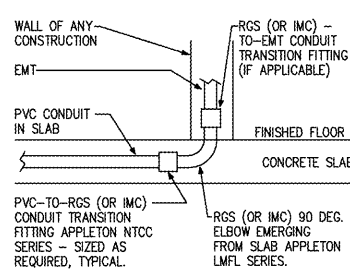
SERVICE ENTRANCE GROUNDING

SCALE: _____ NONE



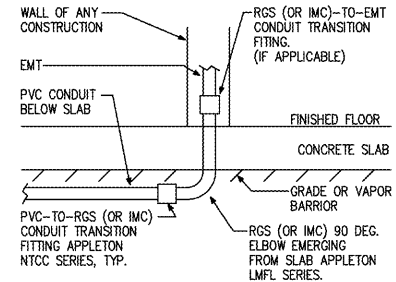
TYPICAL LAY-IN FIXTURE INSTALLATION

SCALE: _____ NONE



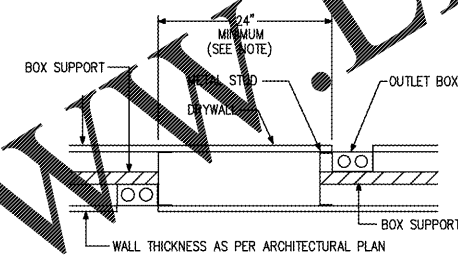
CONDUIT TRANSITION: PVC-TO-RGS IN SLAB

SCALE: _____ NONE



CONDUIT TRANSITION: PVC-TO-RGS BELOW SLAB

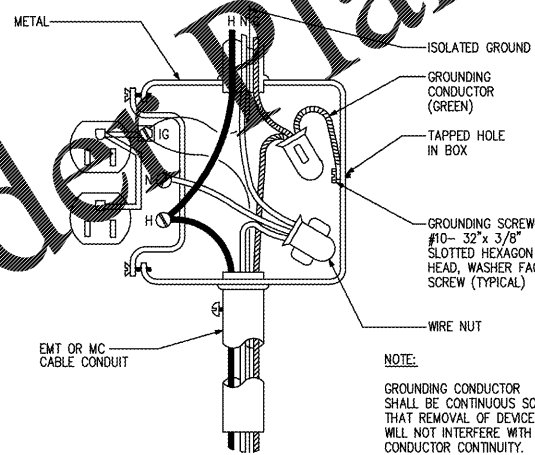
SCALE: _____ NONE



NOTE: THE MINIMUM SHOWN MAY BE REDUCED (IF APPROVED BY LOCAL AUTHORITY) WHEN "WALL OPENING PROTECTIVE MATERIALS" (OLV) ARE INSTALLED IN ACCORDANCE WITH THEIR CLASSIFICATION REQUIREMENTS. WHEN USED, UL CLASSIFIED MOLDABLE PUTTY PADS MUST BE USED ON BOTH BOXES.

RECEPTACLE SEPARATION IN RATED WALLS

SCALE: _____ NONE



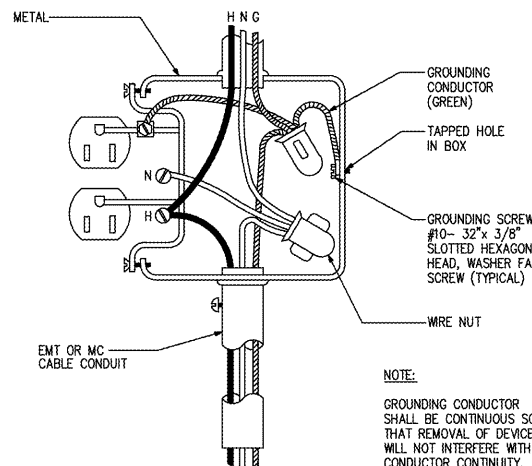
NOTE:

GROUNDING CONDUCTOR SHALL BE CONTINUOUS SO THAT REMOVAL OF DEVICE WILL NOT INTERFERE WITH CONDUCTOR CONTINUITY.

ISOLATED GROUND RECEPTACLE INSTALLATION

SCALE: _____ NONE

NOTE: USE EMT IF LOCAL CODE AUTHORITY DOES NOT ALLOW MC CABLE. VERIFY MC CABLE USE WITH LOCAL AHJ PRIOR TO BID.



NOTE:

GROUNDING CONDUCTOR SHALL BE CONTINUOUS SO THAT REMOVAL OF DEVICE WILL NOT INTERFERE WITH CONDUCTOR CONTINUITY.

RECEPTACLE GROUNDING DETAIL

SCALE: _____ NONE

NOTE: USE EMT IF LOCAL CODE AUTHORITY DOES NOT ALLOW MC CABLE. VERIFY MC CABLE USE WITH LOCAL AHJ PRIOR TO BID.

GENERAL NOTES AND SPECIFICATIONS

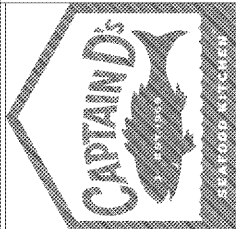
- A. GUARANTEE ALL MATERIALS AND WORKMANSHIP FOR ONE YEAR FROM DATE OF ACCEPTANCE.
- B. COMPLY WITH THE NEC, STATE, AND LOCAL CODES.
- C. USE ONLY COPPER CONDUCTORS AS NOTED. MINIMUM SIZE #12 AWG. USE TYPE THHN, UNCL. ALL CIRCUITS SHALL BE COLOR CODED. USE METAL CLAD CABLE FOR INTERIOR 20 AMP, 120 VOLT BRANCH CIRCUITS ONLY (AS ALLOWED BY CODE AUTHORITIES). ALL OTHER BRANCH CIRCUITS AND FEEDERS SHALL USE BUILDING WIRE, TYPE THHN/THWN INSULATED IN RACEWAY.
- D. USE MINIMUM 1/2" CONDUIT. USE 3/4" MINIMUM GALVANIZED COATS WITH ASPHALTUM OR SCHEDULE 40 PVC IN CONCRETE BELOWGRADE. FOR PVC, TRANSITION TO RIGID BEFORE ENTERING BELOW. USE EMT WHERE CONCEALED IN WALLS AND CEILINGS. USE RIGID IN SLAB AND UNDERGROUND.
- E. ALL ELECTRICAL EQUIPMENT SHALL BE LISTED, COMMERCIAL GRADE.
- F. USE HUBBELL WIRING DEVICES AS FOLLOWS:
 SWITCHES - 20 AMP, 1222-1, 1222-1, 1222-1, 1224-1
 MOTOR STARTERS, USE SQUARE D CLASS 2510
 RECEPTACLES - 20 AMP, #5352-1, 5362-1
 RECEPTACLES - 20 AMP, S063H-1 FOR SAFETY TYPE.
 RECEPTACLES - GFCI, G5362-1 (20A).
 RECEPTACLES - TWISTLOCK, 4700-1.
- G. ALL WIRING MUST BE IN CONDUIT. SEE NOTE 'C' ABOVE.
- H. EQUIPMENT OUTSIDE MUST BE WEATHERPROOF. USE HEAVY DUTY DISCONNECT SWITCHES.
- I. CONDUIT OUTSIDE MUST BE GALVANIZED STEEL OR PVC, AS NOTED ABOVE.
- J. USE 6' MAXIMUM LENGTH OF FLEXIBLE CONDUIT TO FIXTURES.
- K. FLUORESCENT FIXTURES SHALL HAVE HOLD DOWN CLIPS.
- L. REMOVE TEMPORARY WIRING UPON COMPLETION OF WORK. REMOVE UNUSED EXISTING WIRING UPON COMPLETION OF WORK.
- M. USE BUSS TYPE LPS OR LPN FUSES FOR MOTORS AND EQUIPMENT. USE BUSS TYPE KTS OR KTN FUSES FOR PANEL AND TRANSFORMER FEEDERS.
- N. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES, MECHANICAL EQUIPMENT AND EQUIPMENT FURNISHED BY OWNER PRIOR TO ROUGH-IN.
- O. INCANDESCENT FIXTURES SHALL HAVE 150 DEGREES C WIRING FROM OUTLET BOX TO LAMP HOLDERS.
- P. FLUORESCENT LAMPS SHALL BE ENERGY SAVING TYPE TB, 3500 DEGREES KELVIN, UCN, PHILLIPS, GENERAL ELECTRIC, OR SYLVANIA.
- Q. FLUORESCENT FIXTURES SHALL BE FURNISHED WITH ENERGY SAVING ELECTRONIC BALLASTS.
- R. METAL HALIDE LAMPS SHALL BE GENERAL ELECTRIC OR SYLVANIA.
- S. USE "PATE" PIPE SEALS FOR CONDUIT THROUGH ROOF. USE SEALTITE FLEXIBLE CONDUIT FOR EXTERIOR EQUIPMENT. USE 1/2" SEALTITE FLEXIBLE CONDUIT FOR VIBRATING EQUIPMENT.
- T. PANELBOARDS: SEE SHEET T1.1 FOR APPROVED NATIONAL ACCOUNT VENDORS.
- U. TELEPHONE TERMINAL BOARD SHALL BE 3/4"x2"x2" A-D PLYWOOD PAINTED WITH TWO COATS OF FLAT GRAY ENAMEL. PROVIDE #6 GND. TO MAIN GROUNDING ELECTRODE.
- V. VERIFY LOCATION OF PANELBOARDS AND SWITCHES WITH ARCHITECT PRIOR TO ROUGH-IN.
- W. CONTRACTOR SHALL COORDINATE NEW SERVICE REQUIREMENTS WITH THE LOCAL POWER COMPANY AND FURNISH THEM LOAD INFORMATION. FURNISH SERVICE TO TRANSFORMER AS REQUIRED BY THE POWER COMPANY.
- X. DO NOT INSTALL MORE CONDUCTORS IN A BRANCH CIRCUIT HOMERUN THAN SHOWN.
- Y. ALL WORK SHALL BE COORDINATED WITH OWNER'S REPRESENTATIVE.
- Z. INSTALL CONTROL WIRING IN MINIMUM 1/2" CONDUIT FOR ALL HVAC UNITS TO THERMOSTATS AND ROOFTOP UNITS, ETC. SEE MECHANICAL CONTROL AND MANUFACTURER'S DRAWINGS.
- AA. LIGHTING CONTACTORS ARE TO BE 20A NEMA ICS2, MECHANICALLY HELD WITH COIL VOLTAGE AS INDICATED. POLES AS INDICATED, PLUS 2 SPARE. ENCLOSURE TO BE ANSI/NEMA ICS 6, TYPE 1. EATON IS ACCEPTABLE.
- AB. TIME CLOCKS ARE TO BE 40A, NEMA ICS, 7 DAY TIMER WITH ASTRONOMICAL DIAL AND 12 HOUR SPRING CARRY OVER. PROVIDE WITH 3 POLES IN ANSI/NEMA ICS 6, TYPE 1 ENCLOSURE. ACCEPTABLE ARE TORK (7200ZL/7302ZL), PARAGON OR INTERMATIC EQUALS.
- AC. PHOTOELECTRIC CONTROL SHALL BE FIXED MOUNTED, SPST, WITH 2 MINUTE DELAY AND 2000 WATT CONTACT RATING. INSTALL IN A DIECAST, WEATHERPROOF ENCLOSURE.
- AD. RECEPTACLES IN WET LOCATIONS SHALL BE INSTALLED WITH AN OUTLET ENCLOSURE CLEARLY MARKED "SUITABLE FOR WET LOCATIONS WHILE IN USE". THERE MUST BE A GASKET BETWEEN THE ENCLOSURE AND THE MOUNTING SURFACE, AND BETWEEN THE COVER AND BASE TO ASSURE A PROPER SEAL. THE ENCLOSURE MUST EMPLOY STAINLESS STEEL MOUNTING HARDWARE AND BE CONSTRUCTED OF IMPACT RESISTANT POLYCARBONATE. THE OUTLET ENCLOSURE SHALL BE LISTED BY UNDERWRITERS LABORATORIES INC. ENCLOSURE MUST BE MANUFACTURED BY TAYMAC CORPORATION OR EQUAL.
- AE. FLUORESCENT LAMP EMERGENCY POWER SUPPLY SHALL BE ONE LAMP AS SCHEDULED ON THE PLANS PROVIDING 1100-1400 LUMENS, MINIMUM. THE BATTERY SHALL BE A NICKEL CADMIUM TYPE, RATED FOR A TEN YEAR LIFE. INCLUDE TEST SWITCH AND AC ON INDICATOR LIGHT, INSTALLED TO BE OPERABLE AND VISIBLE FROM THE OUTSIDE OF AN ASSEMBLED LUMINAIRE.



CAPTAIN D'S

7525 STATE AVENUE
KANSAS CITY, KS 66112

CAPTAIN D'S, LLC
624 GRASSMERE PARK DRIVE,
SUITE 303
NASHVILLE, TN 37211



Job Number: _____

Revisions: _____

E-8
ELECTRICAL
DETAILS