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## 263323 - Emergency Power Supplied Systems

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## SECTION 26 3323 - EMERGENCY POWER SUPPLIED SYSTEMS

### PART 1 – GENERAL

- 1.1 Related Requirements Specified Elsewhere:
- A. Chapter 5, Division 26, Section 260100.
  - B. See Chapter 5, Division 01, Section 017700.1.1.B.1.i Closeout Procedures - Project Record Documents for equipment list requirements for all equipment provided in this section.
- 1.2 A separate and independent system of light fixtures outlets, conduit, wiring and distribution panels, etc., provided in all buildings for a 208Y/120 volt emergency system powered by generator or storage batteries.
- 1.3 The emergency system shall include:
- A. Emergency Lighting for all corridor, hallway and stairway that is required by code to support the evacuation and egress of a building during an emergency which results in the loss of normal power shall comply with the following:
    - 1. Emergency lighting levels shall be sufficient to evacuate a building as required by code.
    - 2. Emergency lighting can be combined with normal lighting if one of the following methods is used.
      - a. Bodine ballasts in fluorescent fixtures.
      - b. UL Listed, NEC/NFPA Compliant, Emergency Lighting Switching Controller
      - c. DC power systems, small and high capacity inverter systems in standard and fast transfer versions. Both single and 3 phase to be used independently or with controls to be used in conjunction with generator systems. These systems should be considered as a means of supplying stored emergency power to serve multiple lighting units or a whole floor or building from 1 source.
    - 3. Exit lights placed so that residents can be led to the most direct route to the exit.
    - 4. Green is the University's preferred color as a standard for Exit signs.
    - 5. LED exit signs shall be illuminated by light emitting diodes and wired in parallel per UL 924 such that if one diode fails, the rest of the sign will stay lit. These units shall operate on power supplied from the emergency power system, Inverter, or batteries.
    - 6. Stencil type signs are permitted.
    - 7. Normal W.P. fixtures shall be used at each exterior egress door, and shall be powered from the life safety system (Inverter/E-Gen, or batteries).

- B. Buildings that are not required to have an Emergency Power Supplied System shall be equipped with Inverter/battery powered exit signs and Inverter/battery powered emergency lighting as directed by the University.

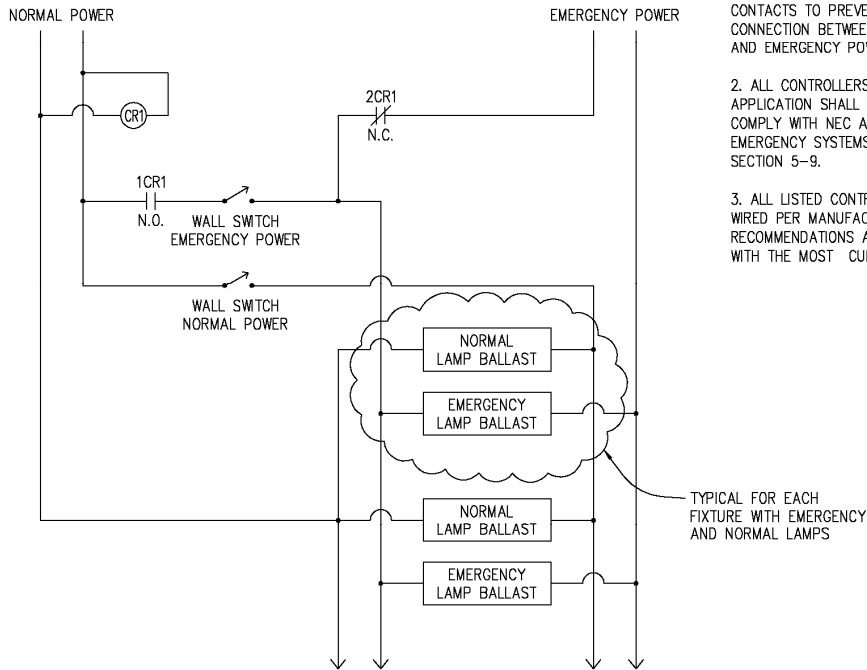
## PART 2 - PRODUCTS

- 2.1 All systems listed below shall be submitted to the client for review and approval.
- 2.2 Exit Signs:
  - Hubbell/Dual Lite CSX Series
  - Hubbell/Dual Lite LX Series
  - Cooper Sure -Lites UX
- 2.3 Dorm High & other High Abuse Areas: Life Time warranty on lens and housing Kenall Series 6500 – LED Trailmate XMLB/METSU/METDU.
- 2.4 Emergency Lights: (where permitted by the Owner)
  - A. Dorm Areas
    - Hubbell/Dual-Lite AS Series
    - Hubbell/Dual-Lite CVEC Series
    - Cooper Sure-Lites XR Series
    - Lithonia - Series C/M & TITAN
    - Kenall - Exilume Series
  - B. Academic Areas Only
    - Hubbell/Dual-Lite CV Series
    - Hubbell/Dual-Lite AS Series
    - Hubbell/Dual-Lite LZ Series
    - Cooper Sure-Lites CC2 & CC8 Series
    - Cooper Sure-Lites LPX(H) Series
    - Lithonia - Series ELU-C/CM or TITAN
  - C. High corrosion area outdoors
    - Hubbell/Dual-Lite NEMA 4 X Series
  - D. High corrosion area indoors
    - Hubbell/Dual-Lite LM Series
  - E. Batteries to be - Maintenance-free Lead Calcium.
- 2.5 Combination Exit/Emergency Light/Sign
  - Hubbell/Dual-Lite CVT Series
  - Hubbell/Dual-Lite LT Series
- 2.6 Fluorescent Emergency Ballast: Bodine – B50.
  - A. For existing fluorescent light fixtures:

1. Care shall be taken to make sure that these units are wired according to the manufacturer's recommendations. Self-testing and diagnostics and status indication shall be integral to the unit. The emergency ballast should be fed from the same branch circuit as the AC ballast Or Owner approved equal.
- 2.7 Inverters, provide submittals for approval.
- 2.8 Emergency Lighting Transfer Switching Controller:
- A. As of this 03-03 revision these units are UL Listed and approved for use by the State Electrical Inspector on the University Durham Campus. See Exhibit #1.
    1. Entertainment networks:
      - a. RHG-120.
      - b. RHG-277.
    2. NINE 24, Inc.
      - a. BLTC-R-120.
      - b. BLTC-R-277.
      - c. BLTC-I-120.
      - d. BLTC-I-277.

**Exhibit#1**

EMERGENCY LIGHTING SWITCHING  
 CONTROLLER WIRING DIAGRAM



GENERAL NOTES

1. THIS WIRING DIAGRAM IS GENERIC AND SHOULD BE USED FOR GENERAL INFORMATION ONLY. CR1 IS A DOUBLE POLE RELAY WITH N.O. AND N.C. CONTACTS TO PREVENT A CROSS CONNECTION BETWEEN NORMAL POWER AND EMERGENCY POWER.
2. ALL CONTROLLERS USED IN THIS APPLICATION SHALL BE UL LISTED AND COMPLY WITH NEC ARTICLE 700 EMERGENCY SYSTEMS AND NFPA 101 SECTION 5-9.
3. ALL LISTED CONTROLLERS SHALL BE WIRED PER MANUFACTURERS RECOMMENDATIONS AND IN COMPLIANCE WITH THE MOST CURRENT NEC.

END OF SECTION 26 3323