

CEMP-EM/ET

DEPARTMENT OF THE ARMY  
U.S. Army Corps of Engineers  
Washington, D.C. 20314-1000

ETL 1110-3-432

Engineer Technical  
Letter 1110-3-432

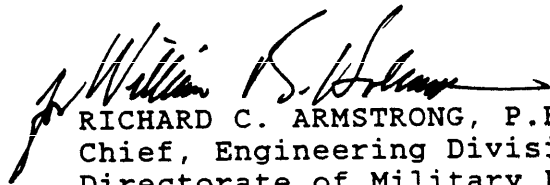
25 November 1991

Engineering and Design  
EXIT SIGNS

1. Purpose. This letter provides advance criteria for design application of exit signs, prior to permanent publication.
2. Applicability. This regulation applies to HQUSACE/OCE elements, major subordinate commands, districts, laboratories, and separate field operating activities (FOA).
3. Action to be Taken. Pending publication of permanent media guidance, the criteria provided in Enclosure 1 will supersede sheets 66 and 67 of STD DET 40-06-04, "Lighting Fixtures," as an interim design application guidance.
4. Implementation. This letter will have special application as defined in paragraph 6c, ER 1110-345-100.

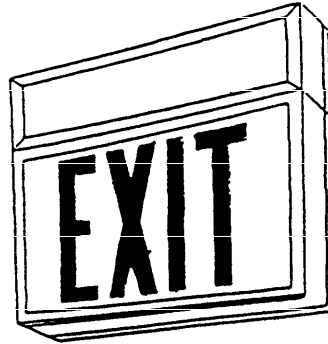
FOR THE DIRECTOR OF MILITARY PROGRAMS:

Encl

  
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Chief, Engineering Division  
Directorate of Military Programs

CORPS OF ENGINEERS

DEPARTMENT OF THE ARMY



TYPE 604  
Stencil Face Exit Signs  
With Self-Contained Emergency Battery

First Suffix	Second Suffix	Description
A		Single face
B		Double Face
	1	End mounted
	2	Top mounted
	3	Back mounted
	4	Stem mounted

Units shall conform to UL 924 and NFPA 101, 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 supply. Following sustained loss of the normal power supply, the unit shall be capable of automatically and instantaneously illuminating the two 6-volt lighting fixtures for a period of not less than 90 minutes at a battery voltage in excess of 87.5 percent of nominal voltage rating. The battery shall be the nickel-cadmium, pocket plate type designed to be maintenance free during the expected battery life, and shall be warranted for not less than 3 years from the date of purchase of the unit, and shall be field replaceable without requiring removal of other components. The battery charger shall be the solid-state type and shall provide a continuous, variable, current limited, filtered and regulated charge rate. The battery and charger shall be contained in a steel cabinet no less than 20 gauge thickness with an enamel finish, unless otherwise approved, which shall be equipped with a push-to-test switch and a meter or LED to visually monitor operations to indicate allowable operating battery voltage when the switch is closed. Mounting brackets or shelf shall be provided, complete with all mounting hardware, all with a finish to match the finish or color of the cabinet. All ferrous metal parts shall receive a rust inhibitive coating before application of the finish coat. The fixture shall have a light-emitting diode pilot light to show that the battery charger is functioning. Fixture shall be prewired, with wiring concealed in the illuminated portion of the fixture housing. The transilluminated letters will be red except where state or country standards mandate green. The contrast level of the letters shall be symmetrical with not less than a 0.7 value, plus or minus 3 percent. The luminance output for normal and emergency mode will not be less than 70 cd/sq m. The surface finish shall have a mat texture.

Fixture type indicated on this sheet shall also conform to requirements specified and indicated in the contract documents.



TYPE 605  
Stencil Face Exit Light

First Suffix	Second Suffix	Third Suffix	Description
A			Single face
B			Double Face
	1		Incandescent
	2		Fluorescent
		A	End mounted
		B	Top mounted
		C	Back mounted
		D	Stem Mounted

Incandescent fixtures shall conform to UL 924, UL 1571, and NFPA 101. Fluorescent fixtures shall conform to UL 924, UL 1570, and NFPA 101. Units 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 supply. Following sustained loss of the normal power supply, the unit shall be capable of automatically and instantaneously illuminating the two 6-volt lighting fixtures for a period of not less than 90 minutes at a battery voltage in excess of 87.5 percent of nominal voltage rating. The battery shall be the nickel-cadmium, pocket plate type designed to be maintenance free during the expected battery life, and shall be warranted for not less than 3 years from the date of purchase of the unit, and shall be field replaceable without requiring removal of other components. The battery charger shall be the solid-state type and shall provide a continuous, variable, current limited, filtered and regulated charge rate. The battery and charger shall be contained in a steel cabinet no less than 20 gauge thickness with an enamel finish, unless otherwise approved, which shall be equipped with a push-to-test switch and a meter or LED to visually monitor operations to indicate allowable operating battery voltage when the switch is closed. Mounting brackets or shelf shall be provided, complete with all mounting hardware, all with a finish to match the finish or color of the cabinet. Fixture shall be prewired, with wiring concealed in the illuminated portion of the fixture housing. The transilluminated letters will be red except where state or country standards mandate green. The contrast level of the letters shall be symmetrical with not less than a 0.7 value, plus or minus 3 percent. The luminance output for normal and emergency mode will not be less than 70 cd/sq m. The surface finish shall have a mat texture.

Fixture type indicated on this sheet shall also conform to requirements specified and indicated in the contract documents.