

Special Specification 6066

LED Blank-Out Sign Assembly



1. DESCRIPTION

Furnish and install LED blank-out sign assemblies capable of displaying one or more multiple messages.

2. MATERIALS

Provide displays that are capable of displaying messages in the colors of red, amber, white, or bluish green.

Furnish displays that forms rows of LED's to display any combinations of messages shown on the plans and as directed.

Provide displays that form messages that are clearly legible under any lighting conditions. At full intensity the sign will be highly visible anywhere within a 15 degree cone centered about the optic axis.

Furnish displays that are completely blanked out when not energized and no phantom words or legend will be visible under any ambient light condition. The sign will display the message by utilizing one to five rows (depending on application) of LED's to form the legend or symbols.

Provide sign displays that are illuminated by 5mm LED's with an average 100,000 hr. life. All LED's will be high in optical power emitting radiation on the order of approximately 2.0 candela's when operated at 20 milliamps DC.

Furnish displays that use solid state power supplies that are UL listed or recognized component. The sign will be capable of continuous operation over a range in temperature from - 35°F to + 165°F.

3. CONSTRUCTION

Completed blank-out signs will consist of a weatherproof housing and door, lens, sign face, LED module, solid state power supplies, and all necessary mounting hardware. Furnish sign components that are readily accessible for maintenance when the door is open.

Furnish signs with housing constructed of 505H22 aluminum alloy. All corner and seams of the housing will be heli-arc welded to provide a weatherproof seal around the entire case. The housing will have a 1 in. drain screen located at each of the four corners of the housing for drainage.

Provide continuous full length stainless steel hinges that connect the housing and the formed one piece aluminum door.

Furnish signs that have #3 stainless steel 1/4 turn link-locks per door to tightly secure the door onto a gasket between it and the housing. The gaskets will be 3/16 in. x 1 in. neoprene to provide a weatherproof seal.

Provide signs with each door fitted with a sun hood of 0.063 in. aluminum. The standard length will be 6 in.

Furnish sign faces that are 090 aluminum or equivalent, and have the entire LED assembly mounted to it. The sign face will be protected by a polycarbonate, matte/clear, face plate.

Provide sign housings that are powder coated per military standards C-24712.

Furnish signs with LED message modules that consist of a rigid aluminum message plate, high intensity LED's, and LED drive electronics.

Install signs with LED's securely mounted in panels with flush press in studs and clips retained with hex nuts. The message color will be provided by a tempered LED correct lens color filter in conformance with I.T.E. specifications.

Furnish door panels that are flat black to maximize legibility when activated. The connection of field wires will be made via a barrier type terminal strip.

Ensure that electrical connections of field wires will be made via a barrier type terminal strip.

Provide fasteners and hardware that are corrosion resistant and stainless steel.

4. TESTING

The installed assembly will be field tested prior to being placed into service to ensure all components are functioning as described herein.

5. MEASUREMENT

This Item will be measured by each LED Blank-out Sign Assembly furnished, installed, made fully operational, and tested in accordance with this special specification or as directed.

6. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "LED Blank-out Sign Assembly." This price will be full compensation for furnishing, installing, and testing LED Sign Assembly, LED modules, drivers; the internal electrical conductors, connectors and mounting hardware; and for all labor, tools, equipment, testing documentation and incidentals necessary to complete the work.