

ROAD COMMISSION FOR OAKLAND COUNTY

SPECIAL PROVISION
FOR
CASE SIGN (NON-ILLUMINATED)

RCOC/TOC

PAGE 1 OF 3

RCOC20SP820E

ORG:05-07-21

REV: 03-01-25

a. Description

This work consists of retroreflective case signs with non-illuminated faces for installation with traffic signals according to the plans and sections 820, 919, and 921 of the Standard Specifications for Construction except as herein provided.

b. Materials

1. General Requirements

The signs shall be constructed in a workmanlike manner in accordance with the plans and specifications. Moving components, such as doors, etc., shall have a proper fit and free movement.

2. Hardware

Unless otherwise specified, all fasteners, such as screws, bolts, nuts, hinges, pins and clamps, etc. which are partially or wholly exposed on the exterior shall be of American Iron and Steel Institute (AISI) Series 300 Stainless steel. The mounting hub for the case sign shall be 1-½ inch, malleable iron (KK-197).

3. Painting Requirements

Prior to painting the case sign, all metal surfaces shall be cleaned, and surface treated in accordance with standard industry practice to assure bonding of the paint to the metal.

The coating system shall consist of durable and weather resistant enamels of the color specified and shall be applied at a uniform thickness without blisters, runs, or other defects. The average dry film thickness shall be 1.5 mils and determined by Method A, Inductance Thickness Gage, as specified in measurement of Dry Film Thickness of Nonmetallic Metal Base, Varnish, Lacquer, and Related Products Applied on a Nonmagnetic Metal Base, ASTM D 1400. The metal interior of the sign shall be coated with a semi-gloss or gloss white enamel.

The exterior of the sign shall be coated with a semi-gloss or gloss yellow enamel, as specified on the plans. When yellow is specified, the color of the coating shall match the central color within the limits shown on the "Highway Yellow Color Tolerance Chart," except that the color shall be darker than the central color.

4. Retro-Reflective Case Sign Face for Non-Illuminated Case Sign

A. General requirements

The case sign faces shall be fabricated in a professional manner in accordance with these specifications. The signs must be fabricated to the proper size to fit in standard case sign fixtures.

The graphics used for the sign faces must be in strict compliance with the current Michigan Department of Transportation (MDOT) sign fabrication guidelines and the current Michigan Manual of Uniform Traffic Control Devices (MMUTCD).

B. Materials

The case sign panel substrate must conform to the requirements for aluminum alloy sheets in ASTM B 209, alloys 6061-T6 or 5052-H38. All sign blanks must be fabricated from nominal 0.081-inch-thick aluminum sheet having a minimum thickness of 0.078 inch. The substrates must be cut to proper size as required (i.e. 12" x 27", 24" x 30", or 36" x 36", $\pm 1/16"$).

The materials used for the sign graphics must be:

For White Sign Background – 3M Company, Diamond Grade DG³ Reflective Sheeting, Series 4000, ASTM Type XI; or Avery Dennison, OmniCube, Series T-11500 ASTM Type XI; or approved equivalent.

For Black Sign Copy – 3M Company, Scotchcal, ElectroCut, Film #1178; or Avery Dennison, Transparent Overlay Film, OL-2003; or approved equivalent.

For Red Sign Copy – 3M Company, Scotchlite, ElectroCut, Film #1172; or Avery Dennison, Transparent Overlay Film, OL-2008; or approved equivalent.

Warranty - The name of the manufacturer of the sheeting and film used for fabrication, along with a Warranty Statement (if requested by the Engineer), must be provided on the certificate of material compliance. All materials must be from the same manufacturer.

5. Acceptance

Provide General Certification per the MDOT's *Materials Quality Assurance Procedures Manual* to the Engineer that the materials meet the requirements specified herein.

c. Construction.

All work must be in accordance with the contract documents.

1. Sign installation date sticker

The Engineer will provide installation date stickers to the Contractor at the preconstruction meeting.

At the time of installation, place an installation date sticker on the back lower portion of the signs.

d. Measurement and Payment.

The completed work, as described, will be measured and paid for at the contract unit price using the following pay item(s).

Pay Item Pay Unit

Case Sign, __ Way, __ inch by __ inch, Non-Illuminated, RCOC Each

Case Sign, __ Way, __ inch by __ inch, Non-Illuminated, Salv, RCOC Each

Case Sign, __ Way, __ inch by __ inch, Non-Illuminated, RCOC (Ea) and Case Sign, __ Way, __ inch by __ inch, Non-Illuminated, Salv, RCOC (Ea) of the size and the number of faces shown on the plans, will be measured as a unit. The contract unit price each shall be payment in full for furnishing and installing the non-illuminated case sign, with specified retro-reflective sign face, fittings, brackets, hardware, and such other material as may be required to provide a complete and operating job as specified herein and as shown on the plans. Retro-reflective case sign faces are considered part of this pay item and will not be paid for separately.