CARSONITE PRODUCT SPECIFICATION FOR DUAL SIDED MARKER CIB-380

1 SCOPE

This specification covers the general requirements for materials of construction and physical and mechanical properties for continuous glass fiber reinforced, dual sided markers. This product may be used for a Utility Identification Marker or to provide nighttime and daytime delineation for utility lines where long term outdoor durability and impact and vandal resistance are required.

2 GENERAL REQUIREMENTS

2.1 DESIGN

The CIB-380 Marker shall consist of a constant cross sectional profile with a flat central web section to which reflective sheeting or rural numbering system may be applied. The identification shall be protected by raised reinforcing ribs, which run longitudinally along each edge. The bottom end of the marker shall be pointed for ease of ground penetration purposes.

2.2 MATERIAL

The material of construction shall be a continuous glass fiber and marble reinforced thermosetting composite which shall be resistant to vandalism, impact, ultraviolet light, ozone, and hydrocarbons and which is temperature resistant from -40°F to +140.

2.3 IDENTIFICATION (OPTIONAL)

Each marker shall be permanently marked with the Manufacturer's name and date of manufacture. Letters shall be a minimum of 3/8 inch in height and are to be permanently embedded in the post.

2.4 WORKMANSHIP

The CIB-380 shall exhibit good workmanship and shall be free of burns, discoloration, and other

objectionable marks or defects, which affect appearance or serviceability.

3 PHYSICAL AND MECHANICAL PROPERTIES

3.1 DIMENSIONS

The CIB-380 Marker shall conform to the dimensions shown in drawing CIB30XXXX-D.

3.2 LENGTH

The post shall be typically 66 inches in length or as specified. The required anchoring depth shall be 18 inches unless otherwise specified. (Detailed installation instructions shall be provided by the manufacturer.)

3.3 HEAT RESISTANCE

A 66-inch marker shall be conditioned a minimum of one hour in an oven at 140°F, ±3°F. The conditioned post shall be capable of straightening itself within five seconds when bent 90° at the midpoint for each of four bends. The test of each post shall be completed within two minutes of removal from the oven or environmental chamber.

3.4 COLD RESISTANCE

A 66-inch marker shall be conditioned a minimum of two hours at -40°F, ±3°F in an environmental chamber or dry ice and alcohol bath. The conditioned post shall be capable of straightening itself within five seconds when bent 90° at the midpoint for each of four bends. The test of each post shall be completed within two minutes of removal from the environmental chamber or dry ice bath.

3.5 IMPACT RESISTANCE

The marker shall be self erecting and remaining serviceable after being subjected to a series of direct impacts by a typical passenger sedan. The marker shall be tested complete with attached numbering identification or sheeting proposed for use.

Posts shall be capable of withstanding a series of five impacts head on (90°) into traffic face of the post at a speed of 35 mph, without displaying vertical cracks in the web section or a loss in legibility of the number or a loss of more than 40% of its reflective sheeting.

3.6 **COLOR FASTNESS**

The Marker shall be pigmented throughout the entire cross section so as to produce a uniform color, which is an integral part of the material. Ultraviolet resistant materials shall be incorporated in the construction to inhibit fading or cracking of the delineator upon field exposure.

4 **WARNING DECALS OR REFLECTIVE SHEETING**

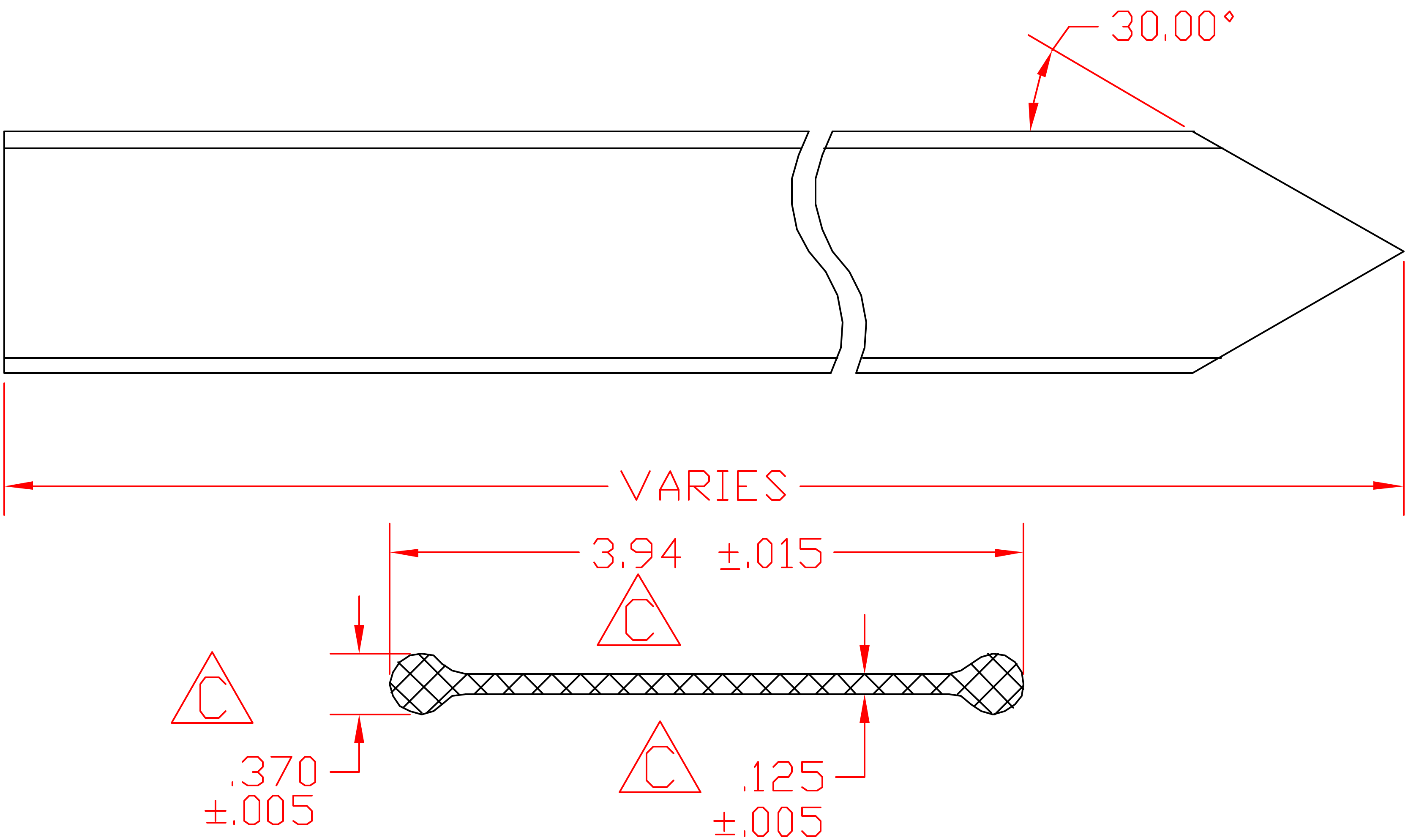
4.1 **MATERIAL**

The numbers or retroreflective sheeting shall be impact resistant with a pressure sensitive adhesive backing and shall be subject to approval by the ordering agency. The sheeting shall be mounted by an approved positive means, which has adequate strength to prevent loss of adhesion during the life of the sheeting.

4.2 **COLOR**

4.2 A - Standard Colors

The Carsonite CIB-380 Rural Identification Marker shall be supplied in standard colors, which comply with A.P.W.A./U.L.C.C. codes: Green, Red, Brown, Yellow, White, and Orange.



REV.	ECN No.	BY	DESCRIPTION	DATE
C	071999	MTH	CHANGED DIMS/TOLERANCE	7/19/99
B	081298	MTH	CHANGED DIMS/TOLERANCE	8/12/98
A	051298	MTH	RELEASE OF CIB FORMAL DWG	5/12/98

DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED

TOLERANCES UNLESS OTHERWISE SPECIFIED .0=±.1; .00=±.03; .000=±.005

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PART NAME: CIB-380

DRAWING NO: CIB30XXXX-A

SCALE	SHEET	DATE	DRAWN BY	APPROVED BY
NTS	1 OF 1	7/19/99	[illegible]	[illegible]