

CARSONITE PRODUCT SPECIFICATION

CHANNELIZER

1 SCOPE

These specifications define requirements for high performance, surface mounted, flexible plastic channelization and delineation devices. This device is to be bonded to asphalt or concrete surfaces to provide traffic control in areas requiring easy channelizer removal or relocation and excellent impact resistance.

2 GENERAL REQUIREMENTS

2.1 DESIGN

The Channelizer shall incorporate a vertical tube to accept reflective sheeting, and a flexible boot to provide impact rebound. The post member shall be capable of being easily and quickly removed from the base and boot members.

2.2 MATERIAL

The materials shall be flexible polymers and elastomers which shall be resistant to impact, ultraviolet light, ozone, and hydrocarbons, and shall remain impact resistant from -20°F to +120°F.

2.3 WORKMANSHIP

The post and base shall exhibit good workmanship and shall be free of burns, discoloration, contamination, and other objectionable marks or defects that affect appearance or serviceability.

2.4 INSTALLATION

The installation system shall consist of either a thermosetting epoxy adhesive or a pad of flexible mastic adhesive. Both sides of the mastic pad shall be protected with pre-mask tape.

3 PHYSICAL AND MECHANICAL REQUIREMENTS

3.1 DIMENSIONS

The Channelizer(Round) shall conform to the dimensions shown in Figure 1. The Channelizer (Flat) shall conform to the dimensions shown in Figure 2.

3.1.1 Width

The Channelizer tube shall have a minimum cylindrical diameter of 2.25 inches. The Channelizer (Flat) shall have a width at the top of 3.00 inches nominal.

3.1.2 Height

The height shall be specified by the customer specifications.

3.1.3 Base

The non-flexible portion of the base shall not exceed one (1) inch in height.

3.2 **COLOR**

The color of the post shall be white, yellow or orange, as dictated by appropriate MUTCD guidelines for the particular application.

3.3 **TENSILE STRENGTH**

The Channelizer tube shall have a minimum tensile strength of 1500 pounds per square inch. The tensile stress shall be determined in accordance with "Standard Method of Test for Tensile Properties of Plastic", ASTM designation D638 (Test Specimen Type I). The rate of jaw separation shall be two (2) inches per minute.

3.4 **TEMPERATURE RESISTANCE**

3.4.1 Elevated Temperature Bend Test: The Channelizer units shall be conditioned a minimum of 2 hours at $120^{\circ}\text{F} \pm 3^{\circ}\text{F}$. The unit shall then be held in a vertical position on a solid surface, as it would be in field use, and the post member bent 90° such that the post end touches the floor surface. The post member shall return to within 5° of upright position within 15 seconds. The bend test shall be repeated three times in quick succession, completing the test within 2.5 minutes of channelizer removal from the conditioned temperature.

3.4.2 Reduced Temperature Bend Test: The channelizer shall meet requirement of 3.4.1 when conditioned $-20^{\circ}\text{F} \pm 3^{\circ}$ for two hours.

3.4.3 Reduced Temperature Impact Test: The tube portion of the unit shall be conditioned for a minimum of 2 hours at $-20^{\circ}\text{F} \pm 3^{\circ}\text{F}$. The tube shall then be struck flush against

a flat solid surface three (3) times within two minutes after removal from the conditioning chamber. To strike the tube it should be manually swung through a 90° arc, the tube shall not fracture or shatter upon impact.

3.5 IMPACT RESISTANCE

The post shall be installed in accordance with manufacturer's instructions. The channelizer shall be capable of withstanding a minimum of 10 impacts at a speed of 35 m.p.h. into the traffic face of the post by the bumper of a typical American sedan.

4 REFLECTORS

4.1 DESCRIPTION

The reflector shall be a three (3) inch minimum width impact resistant band of retroreflective sheeting with pressure sensitive adhesive backing unless otherwise specified by ordering agency.

4.2 MOUNTING

Unless otherwise specified, the sheeting shall be placed a maximum of two (2) inches from the top of the tube. The sheeting shall be of appropriate color to meet requirements of MUTCD.

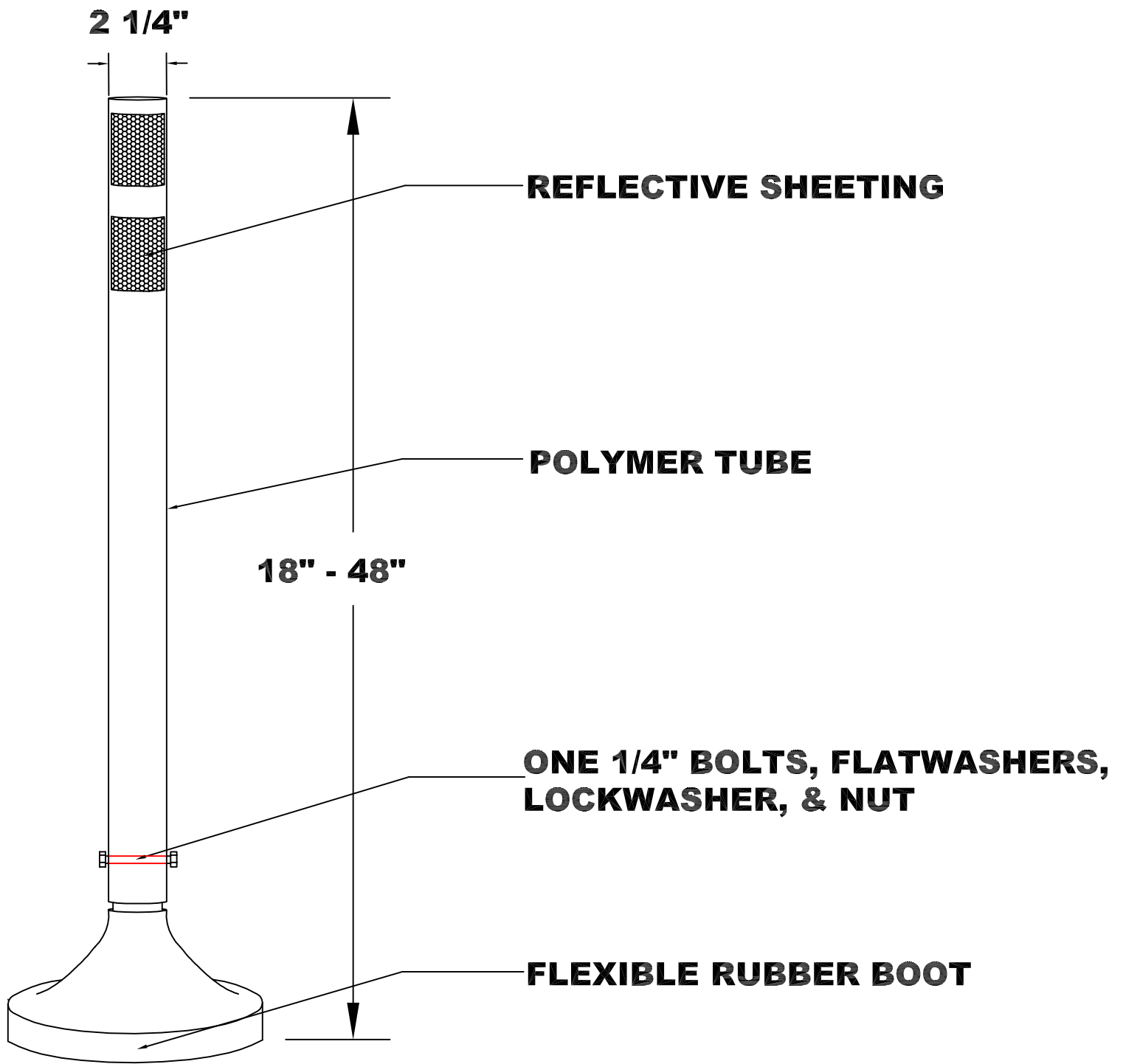


FIGURE 1

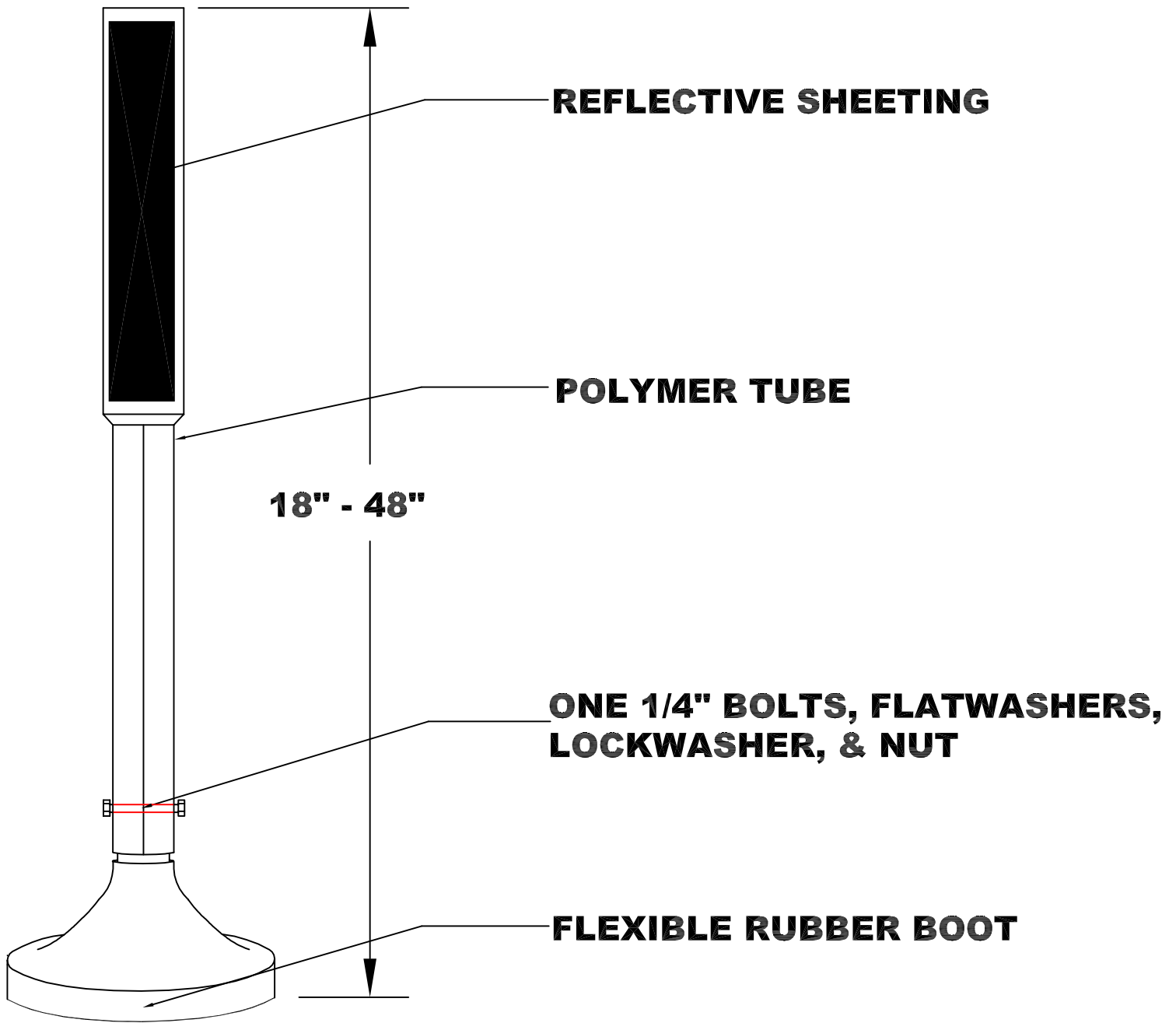


FIGURE 2