

## DIVISION 63 - Street Name Signs

### 63:01 STREET NAME SIGNS FOR MAST ARM POLES SPECIFICATIONS:

- A. Scope: The scope of these specifications is to describe the minimum requirements of the City of Chesapeake for the fabrication, delivery, furnishing of all mounting hardware and mounting the signs as shown on the plans.
- B. Materials:
1. **Blades**: The sign base material shall be aluminum alloy, 0.125 gage and be degreased and etched or anodized in accordance with Virginia Department of Transportation specifications. They shall have a flat surface and not be embossed. All blade corner radii shall be 1½ inch.
  2. **Faces**: The color combination shall consist of a blue reflective background and silver reflective message and border. They shall be fabricated in accordance with Virginia Department of Transportation specifications for either, Type L-1, reverse silk screen or Type L-2, cutout reflective sheeting, heat activated process.
    - a. Type L-1 process shall use 3-M Company's encapsulated lens sheeting #2870 silver background screened with #883 blue transparent process color to form the message and border.
    - b. Type L-2 process shall use 3-M Company's encapsulated lens sheeting #2875 blue, the message and border to be made of encapsulated lens sheeting #2870 silver.
    - c. All faces shall be edged and sealed as prescribed by the 3-M Company.
  3. **Mounting brackets** shall be "Astro Bracket".
- C. Fabrication:
1. **18 Inch Blades**: 8 inch E-Series upper case and 6 inch E-Series lower case letters shall be used on all 18 inch x variable signs to meet standards for good legibility. All prefixes and suffixes to be 8-inch E-Series upper case and 6 inch E-Series lower case letters. The face will have a 1-inch border and be edge sealed.
  2. **30 Inch Blades**: 6 inch E-Series modified upper case and 4½ inch E-Series lower case letters shall be used on all 30 inch x variable signs to meet

standards for good legibility. All prefixes and suffixes to be 6 inch E-Series modified upper case and 4½ inch E-Series lower case letters. The face will have a 1-inch border and be edge sealed.

3. Horizontal spacing of letters and words shall be in accordance with accepted VDOT standards for good legibility.

D. Measurement and Payment:

Signs are to be measured and paid for per each. Which price will include all materials, mounting hardware, fabrication and mounting in place as shown on construction plans.

**63:02 POST MOUNTED STREET NAME SIGNS SPECIFICATIONS:**

Any street name signs manufactured and installed per approved engineering plans will be required to meet the following criteria:

A. Location:

1. Sign locations shall be depicted on the approved plans; quadrants for both minor street approaches to an intersection shall have street name signs. In residential subdivisions at the intersection of two minor streets, a single set of street name blades shall be required as determined by Traffic Engineering.
2. The lateral placement of the sign shall be as follows:
  - a. Curb and gutter streets – 2 foot from the face of curb to near edge of the sign.
  - b. Streets without curb and gutter – 6 foot to 12 foot from pavement edge to the near edge of the sign. Desirably, the near edge of the sign should be located 2 foot outside the stabilized shoulder edge.

B. Installation:

1. The vertical distance between the pavement surface or top of curb (where it exists) and the bottom of the sign shall be 7 feet. The street name sign and regulatory sign will be installed on the same post where appropriate. In this case the street sign will go above the regulatory sign and the vertical distance between the pavement surface or top of curb (where it exists) and the bottom of the regulatory sign shall be 7 feet.
2. The angle between blade sets shall be 90 degrees regardless of the intersecting angle of the streets.

3. Sign posts will be installed using a top post inserted into a single breakaway anchor system. The top tube will be a 2 inch galvanized steel sign post, 12-14 feet in length, set in a 2-1/4 inch anchor, 3 feet in length. The contractor will set the anchor sleeve firmly in concrete approximately 32 inches below ground level. The top post will be inserted a minimum of 8 inches into the anchor base and secured to the anchor assembly with a corner bolt. The top post shall be removable from anchor sleeve after concrete has set.
4. Sign blades will be attached to sign post using approved spacers and mounting hardware (See Section C). The hardware, posts, and anchors will be installed in compliance with the manufacturer's installation guidelines to the FHWA breakaway standards.

C. Materials:

1. Blades: The sign base material shall be aluminum alloy, 6 inch – 0.063 gage, 9 inch – 0.080 gage, 18 inch – 0.125 gage, meeting Virginia Department of Transportation Specifications. They shall be degreased and etched or anodized in accordance with above specifications. The blades shall have a flat surface and shall not be embossed. Each sign shall consist of two sets of two back to back mounted blades.

Two 7/16 inch holes shall be punched or drilled in each blade for assembly with sign post. The holes will be centered on the blade and located 1/2 inch from the top and bottom of blade edge; holes should align with prepunched holes on sign post.

Edges and holes shall be smooth and free of burrs and splinters.

All blades shall be cornered at a radius of 1 1/2 inches.

2. Faces: Street name blades will be fabricated in one of the following manners:
  - a. Blades shall be covered with background of #3995 blue 3M VIP Prismatic Grade Reflective Sheeting (or approved equal); lettering shall be cut from white 3M #3990 VIP Prismatic Grade Reflective Sheeting (or approved equal).
  - b. Blades shall be covered with background of #3990 white 3M VIP Prismatic Grade Reflective Sheeting (or approved equal); lettering

shall be cut from blue #1175 3M Electronic Cuttable Film in a reverse film in a reverse film method.

- c. Blades shall be covered with background of #3990 white 3M VIP Prismatic Grade Reflective Sheeting (or approved equal); lettering shall be silk screened with #883 blue 3M Process Color and Clear Coat in a reverse screen method.
- 3. Private Streets: Conform with same specifications except where color of signs will change to #3871 yellow background (high intensity) and #7720-12 black (non-reflective) messages. All materials are only for 6 inch and 9 inch blades. Materials stated are 3M, all others must be pre-approved before use.

- 4. Telescoping Steel Sign Posts & Anchors: The telescoping tubing will be capable of fracturing at the point of connection. When impacted the top tubing can be removed so as to allow the anchor to receive a new top sign post.

Sign posts shall be 14 gauge galvanized steel square tube post with 7/16” prepunched holes on 1” centers. Anchor sleeves shall be 12 gauge galvanized steel square tube post with 7/16” prepunched holes on 1” centers. Sign post and anchor sleeve shall be in compliance with VDOT Road and Bridge Supplemental Specifications, Section 700.

- 5. Required Hardware for Telescoping Steel Sign Posts and Anchors: The hardware listed in Table 1 must be used with the telescoping sign posts and anchors.

TABLE 1 Required Hardware for Telescoping Steel Sign Posts and Anchors	
Corner Bolt	5/16”
Flanged Washer/Nut	5/16”
Rivets	2-1/2” x 5/16”
PVC Spacer	2” x 3/8” (inner dia.)
Nylon Lock Washer	5/16”
Hex Head Bolt	5/16” x 3”
Pyramid Steel Cap	2” x 2”

D. Sign Sizes and Lettering:

1. 6 Inch Blades: 4 inch capital letters in Highway Gothic “C” or “D” series shall be used on 6 inch x 24 inch, 6 inch x 30 inch, or 6 inch x 36 inch faces as required to meet accepted standards for good legibility. 3-inch letters and /or “A” or “B” series will be permissible only in the case of extremely long street names which cannot be fabricated using the above combinations. Number of letters per name not to exceed 14. All prefixes (such as East, South, etc., when not an actual part of the street name) and all suffixes (such as Avenue, Circle, Highway, etc.), shall be abbreviated (such as E for East and Av for Avenue, etc.) and shall be made from 2 inch “C” letters. 6 inch faces shall have  $\frac{3}{8}$  inch white border (3M #3990). All copy shall be centered vertically. Horizontal spacing of letters and words shall meet accepted standards for good legibility.
2. 9 Inch Blades: 6 inch capital letters in Highway Gothic “C” or “D” series shall be used on 9 inch x 36 inch or 9 inch x 42 inch faces as required to meet accepted standards for good legibility. “A” or “B” series will be permissible only in the case of extremely long street names which cannot be fabricated using the above combinations. All prefixes and suffixes shall be made from 3-inch “C” letters. All faces shall have  $\frac{1}{2}$  inch white border (3M #3990). All copy shall be centered vertically. Horizontal spacing of letters and words shall meet accepted standards for good legibility.

E. Street Name Size:

1. Primary and secondary road intersections shall use 9-inch blades for street name and “B” size traffic control signs (as defined in the MUTCD).
2. Residential collector roads shall use 6-inch blades for street name and “A” size traffic control signs (as defined in the MUTCD).

- F. Public Works inspector assigned to the project is to be notified 48 hours before installation of signs.