

FONT DESIGN FOR STREET NAME SIGNS

The Federal Highway Administration (FHWA) has terminated its approval of the Clearview Highway font, which PennDOT had specified as the standard font for freeway guide signs and conventional highway street name signs. Standard Alphabets for Traffic Control Devices, more commonly referred to as Highway Gothic, is now the only approved font for the design of traffic signs.

FHWA has not issued a mandate on the replacement of signs using the Clearview font, but all future sign installations are to use the Highway Gothic font. **This means existing signs may remain in use for their normal service life but should be replaced with a sign using Highway Gothic, when appropriate, as part of routine maintenance.**



D3-1 street name sign with Highway Gothic font.

Highway Gothic is a modified version of the standard Gothic font and was originally developed in the late 1940s by the California Department of Transportation. The font has six configurations known as letter series (B, C, D, E, E (modified), and F). Each series increasingly widens the individual letter sizing and expands the spacing between the letters.

Street name signs (D3-1) and most other guide signs must be designed separately because of variability in the message or legend that limits the ability to standardize sizes. PennDOT Publication 236, *Handbook of Approved Signs*, provides the minimum requirements for street name signs (D3-1). Additionally, the 2009 Manual on Uniform Traffic Control Devices (MUTCD) states that letters used on street name signs (D3-1) must be composed of a combination of lowercase letters with initial uppercase letters.

Table 2D-2 from the MUTCD shows the appropriate letter height for each roadway type sign. For signs on most local roadways, an initial letter uppercase height of 6 inches should be used. However, on streets with speed limits of 25 miles per hour or less, letter size can be as small as 4 inches for uppercase and 3 inches for lowercase letters. No matter the roadway type sign, the lowercase letter height is always three-quarters the height of the initial uppercase. **Note that there is no relation between letter style and case: street name signs still need to use mixed-case lettering in the Highway Gothic font.**

Table 2D-2. Recommended Minimum Letter Heights on Street Name Signs

Type of Mounting	Type of Street or Highway	Speed Limit	Recommended Minimum Letter Height	
			Initial Upper-Case	Lower-Case
Overhead	All types	All speed limits	12 inches	9 inches
Post-mounted	Multi-lane	More than 40 mph	8 inches	6 inches
Post-mounted	Multi-lane	40 mph or less	6 inches	4.5 inches
Post-mounted	2-lane	All speed limits	6 inches*	4.5 inches*

* On local two-lane streets with speed limits of 25 mph or less, 4-inch initial upper-case letters with 3-inch lower-case letters may be used.

To aid in the development of guide signs, the FHWA publication *Standard Highway Signs* outlines the following design guidelines for guide signs:

- Whenever practical, the overall dimension of the sign should be in multiples of 6 inches.
- Wider spacing between letters and narrower letter sizing is more favorable than wider letters and narrower spacing. Use of Series B alphabet is optimal for street name signs.
- Sign and letter sizing may be increased to provide additional emphasis or where there is a need for greater legibility. As a rule-of-thumb, letter height should be 1 inch for every 40 feet of desired legibility. This means that a motorist should be able to read the lowercase letter heights of a street name sign on a local road at a minimum distance of 180 feet.

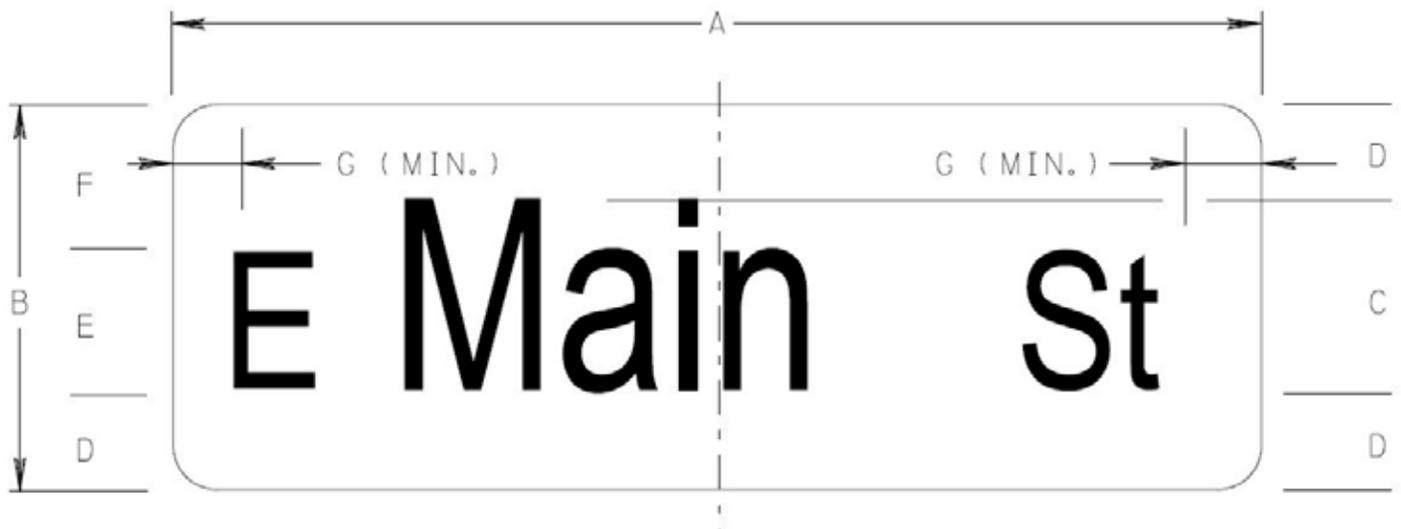
PennDOT Publication 236 also provides guidance on acceptable colors for use on street name signs. While white letters on a green background are recommended, white letters on a brown background, white letters on a blue background, or black letters on a white background are also acceptable. Whichever color scheme is chosen, the same should be used for all signs within the municipality. Also, street name signs must be retroreflective and maintained to the standards established in Section 2A.07 of the MUTCD. The border, as shown on the image on the front page of this tech sheet, is optional.

To assist in the design process, FHWA has created an online resource for calculating the length of text for street signs. The Standard Alphabets

Highway Sign Word Length Calculator is a convenient tool to quickly determine the letter width, spacing, and total length of the text for a sign. The calculator can be found on FHWA's MUTCD webpage, http://mutcd.fhwa.dot.gov/knowledge/hwy_sign_calculator/index.cfm.

Before purchasing any signs, municipalities should refer to PennDOT Bulletin 15 to ensure they are using approved materials from an approved manufacturer. For additional information on all sign design and requirements, refer to the publications listed below.

- 2009 MUTCD, Section 2D
- FHWA's *Standard Highway Signs*
- PennDOT Publication 236, *Handbook of Approved Signs*



DIMENSIONS – IN					
SIGN SIZE A x B	C	D	E	F	G
VAR. x 6"	4*	1	3*	2	1
VAR. x 9"	6*	1.5	4.5*	3	1.4
VAR. x 12"	8*	2	6*	4	2