

# **SUBDIVISION SIGN SPECIFICIATONS**

## ***General Requirements***

The placement of all signs shall be in accordance with applicable sections of the Indiana Manual on Uniform Traffic Control Devices (IMUTCD). The colors of all signs shall also conform to applicable sections of the IMUTCD. Any required signs not specifically referenced herein shall conform to the IMUTCD, the current edition of "Standard Highway Signs", and/or the Indiana Department of Transportation Standard Specifications and Standard Drawings.

Sign suppliers will be required to provide documentation showing compliance with these specifications prior to the installation of any signs within a development. Shop drawings for the signs shall also be supplied prior to manufacture and installation of the signs.

## ***Sign Dimensions***

Standard sign dimensions are as follows:

<b><i>Sign Type</i></b>	<b><i>Dimensions</i></b>
Street Name	8" X 24", 8" X 30" & 8" X 36"
Stop	30" x 30"
Speed Limit	24" x 30"
Yield	30" x 30" x 30"

Details of the stop, yield, and speed limit sign dimensions are shown in Exhibit A and Exhibit B.

## ***Sheeting***

Sheeting for street signs shall be Type III, IV or X. Stop signs and yield signs shall have a Type VII, VIII, or IX preprinted face. Speed limit signs shall have a Type III, IV or X preprinted face. All sheeting types shall be as designated in ASTM D4956.

## ***Street Name Signs***

Street name signs shall conform to the following specifications:

- Lettering for street name signs shall be 6" high upper case letters and 4.5" lower case letters.
- Street name signs shall have black lettering on a white background.
- The sign shall have a 0.375" black border.
- Supplementary lettering for the street suffix (such as Street, Avenue, or Road) and the direction (such as NW) shall be 3" high.
- The block number shall be 3" high.
- All lettering shall be in Standard Highway Signs Series C font.
- Suffixes shall be abbreviated as shown in the following table. The Vanderburgh County Engineering Department must be contacted to approve any abbreviations not shown in this table.

An example street sign is shown in Exhibit C.

FULL SUFFIX	ABBREVIATED	FULL SUFFIX	ABBREVIATED
Alley	ALY	Parkway	PKWY
Avenue	AVE	Place	PL
Boulevard	BLVD	Plaza	PA
Circle	CIR	Point	PT
Court	CT	Road	RD
Cove	CV	Run	RUN
Drive	DR	Square	SQ
Heights	HT	Street	ST
Highway	HWY	Terrace	TE
Lane	LN	Trail	TR
Loop	LP	Way	WAY
Park	PK	Walk	WK

### ***Stop, Yield, and Speed Limit Signs***

Lettering for stop signs, yield signs, supplementary plates, and speed limit signs shall conform to Exhibits D through H.

### ***Sign Blanks***

The backing material for street name signs shall be sheet aluminum in accordance with ASTM B 209 (B 209M), alloy 5052H38, or alloy 6061-T6. The minimum thickness of the sheet shall be as shown for the appropriate sign width as follows:

<b>Sign Type</b>	<b>Thickness, in.</b>
Street Name	0.100
Stop Sign	0.080
Speed Limit	0.080

Fabrication, including cutting and punching of holes shall be completed prior to surface treatment. Material shall be cut to size and shape and shall be free from buckles, warp, dents, cockles, burrs, and defects resulting from fabrication. The surface shall be a plane surface.

All signs shall be packed for shipment and handled during construction in accordance with the manufacturer's recommendations. All sign or sign face damaged prior to acceptance shall be replaced in their entirety.

The bolts, steel flat washers, and lock-nuts used to attach sheet signs to posts shall be stainless steel in accordance with ASTM A276, or type 304 carbon steel in accordance with ASTM A 307, grade A. Carbon steel hardware shall be galvanized in accordance with ASTM A153. Lock washers and hex nuts shall be used in lieu of the lock-nuts when carbon steel hardware is furnished.

The bolts shall be 5/16 in. by 3 in. (8 mm by 75 mm) hex head, full threaded. The steel flat washers shall be size no. 1/4, 0.738 in. (19 mm) outside diameter, 0.317 in. (8.1 mm) inside diameter, and 0.051 to 0.08 in. (1.2 to 2.0 mm) thick and in accordance with Military Specifications MS 15795-811. Nylon flat washers shall be 7/8 in. (22 mm) outside diameter, 0.317 in. (8.1 mm) inside diameter, and shall be 0.032 in. (0.81 mm) thick.

For all signs except street name signs, the nut shall be tightened sufficiently so that the sign is held firmly against the post. However, there shall be no deformation of aluminum sheeting or twisting or damage to the reflective sheeting. A nylon washer and a metal washer shall be placed between each bolt head and the face of the sign.

## **Posts**

All posts shall be 2 lb/ft U-Channel posts painted factory green. The steel used in the posts shall conform to the physical properties of ASTM A 499, grade 60. Posts shall be of uniform flanged channel section such that the area of contact between the post and the sign is symmetrical about the vertical axis of both sign and post. The back of each post shall be formed in a manner to ensure a solid bearing surface over the entire length of the post when mounted back to back. The bearing surface on the back of the post shall be flat. The length shall be as specified with a tolerance of  $\pm 1$  in. ( $\pm 25$  mm). Sign posts shall have holes which shall be 3/8 in. (9.5 mm) in diameter located on the center-line and spaced on 1 in. (25 mm) centers beginning 1 in. (25 mm) from the top. Punching or drilling accuracy shall be sufficient to allow bolting posts together back to back without redrilling holes, using 5/16 inch (8 mm) diameter bolts.

The finished posts shall be machine straightened and have a smooth uniform finish free from cracks, flaws, injurious seams, laps, blisters, and edges which are ragged, sharp, and imperfect, or other defects affecting their strength, durability, or appearance. The maximum variation in straightness shall be no more than 1/4 in. (6 mm) in any 5 ft (1.5 m) of length, or exceed in inches (millimeters) 1/4 times the number of feet (meter) of length divided by five. Bolt holes of the diameter specified shall be accurately spaced vertically and centered horizontally so that holes will register for back to back application.

Posts shall be painted with a weather resistant, rust inhibited, high quality dark green baked alkyd resin enamel, which shall produce a hard mar resistant coating, free from paint cracks, blisters or other defects. The quality of the paint shall be such that when the finished post is struck a light blow with a sharp tool, the paint shall not crack or chip, and if scratched with a knife, shall not powder. The minimum thickness of the dry enamel film shall be one mil. Painting shall be the final process after all fabrication and punching has been completed. The paint shall be dry before posts are bundled.

Splicing of channel posts will not be permitted. Posts shall be embedded in the ground a minimum of 3'.

Sign post are not to be poured into concrete sidewalks. A 4" PVC sleeve must be used for sign installations in sidewalks.

## **Sign Post Mounting Brackets**

Sign post mounting brackets shall be 12" in length. Brackets shall Style #812 90 degree brackets, 180 degree brackets, or 90 degree crosspiece brackets for the installation of a second sign. The brackets shall be made of high strength aluminum alloy number 380 having a tensile strength of 45,000 psi to 49,000 psi. The post top and cross brackets shall have two angled gussets on ribs on each side for extra strength and shall be smoothly finished and free of holes, pits or flaws. Brackets shall be drilled and tapped to receive 5/16" - 18 x 5/16" set screws.

These standards have been adopted on this 25<sup>th</sup> day of January 2011

  
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Lloyd Winnecke, President

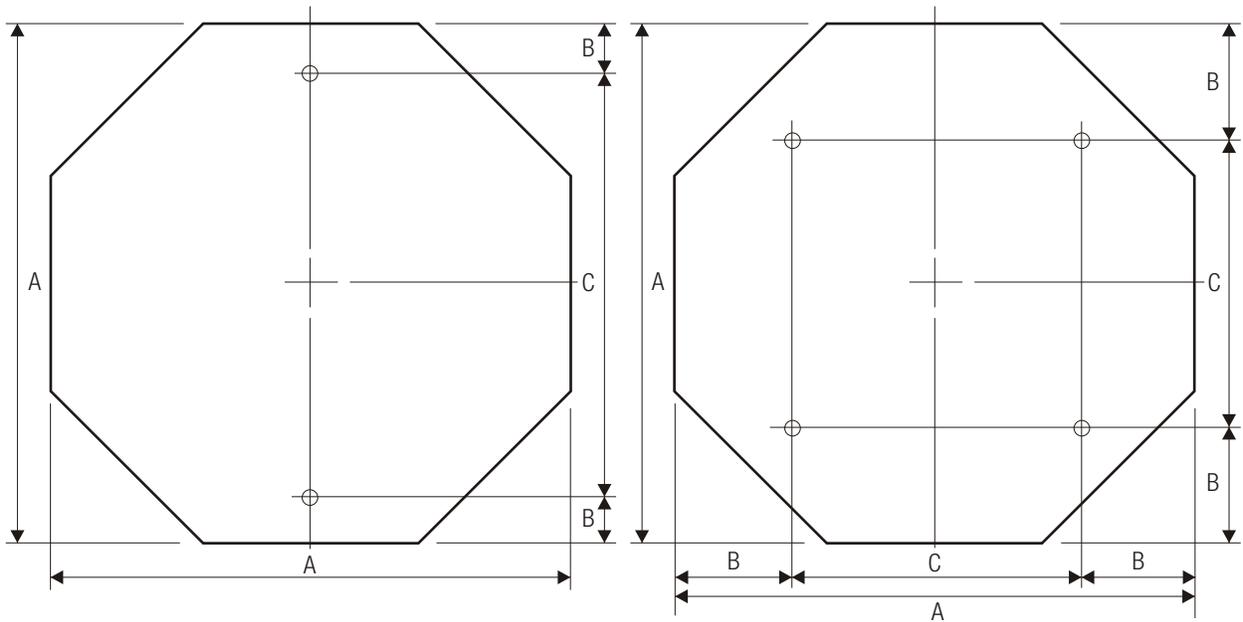
  
\_\_\_\_\_  
Marsha Abell, Vice President

  
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Stephen Melcher, Member

1/25/11

# BLANK STANDARDS

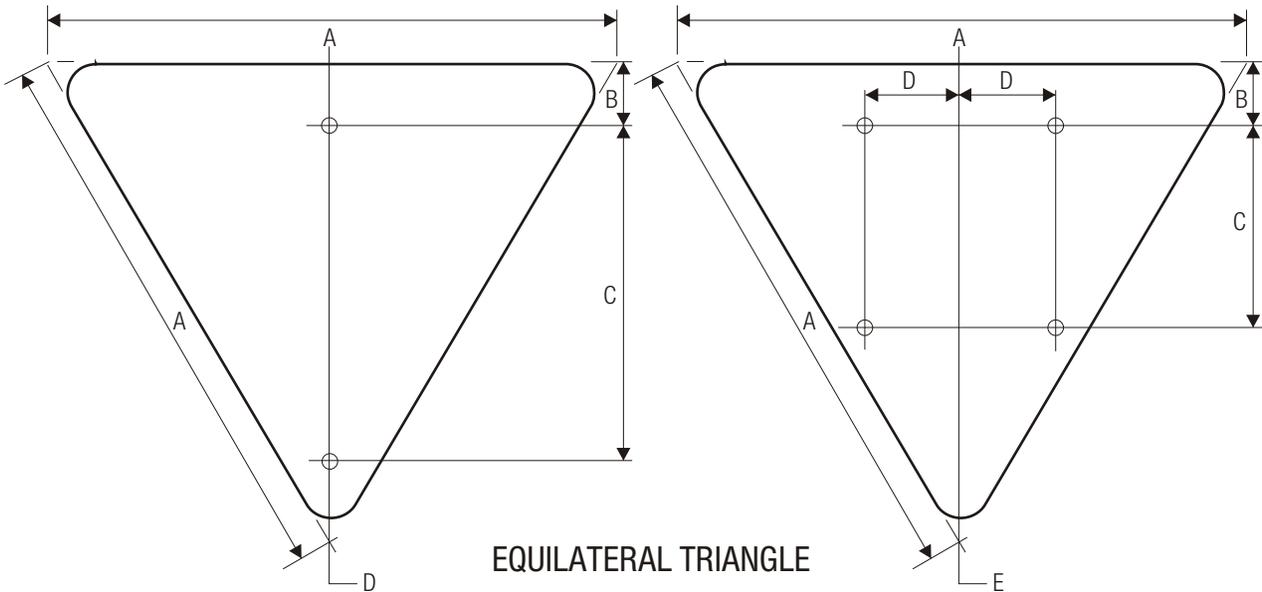
(ENGLISH)



OCTAGON

A	B	C
24	3	18
30	3	24
36	3	30

A	B	C
48	9	30

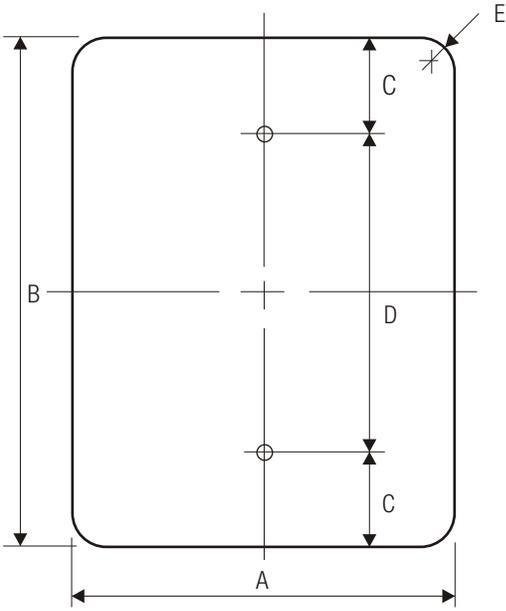


EQUILATERAL TRIANGLE

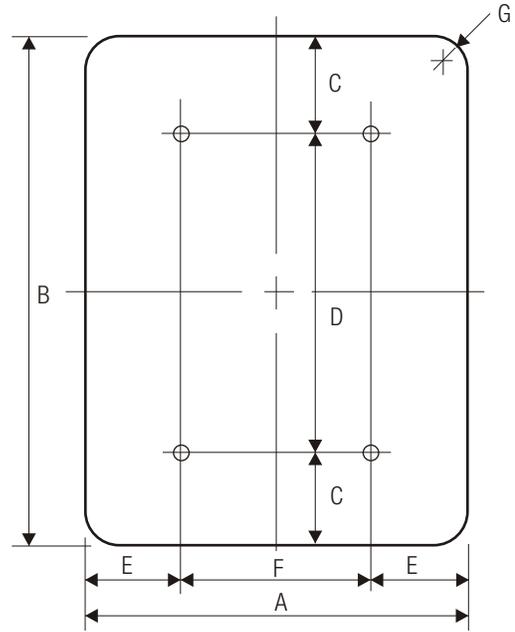
A	B	C	D
30	3	18	1.5
36	3	21	2

A	B	C	D	E
48	3	12	12	3
60	3	18	15	4

## VERTICAL RECTANGLE

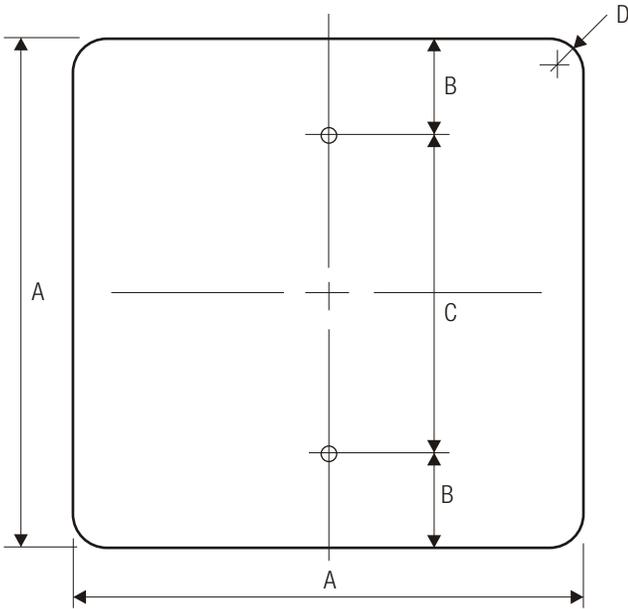


A	B	C	D	E
12	18	1.5	15	1.5
18	24	3	18	1.5
24	30	3	24	1.5
30	36	3	30	1.875

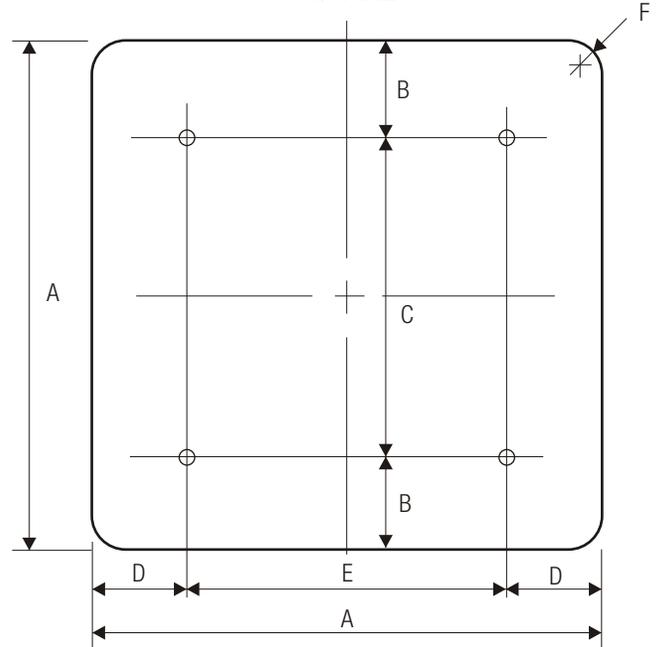


A	B	C	D	E	F	G
36	48	6	36	6	24	2.25
48	60	6	48	9	30	3

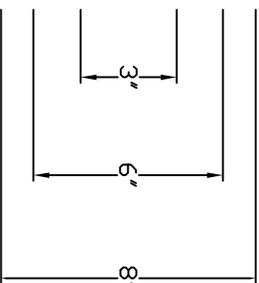
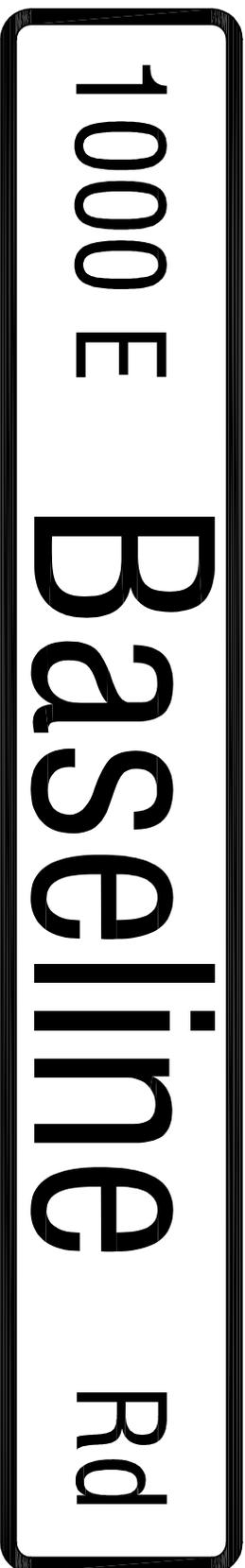
## SQUARE



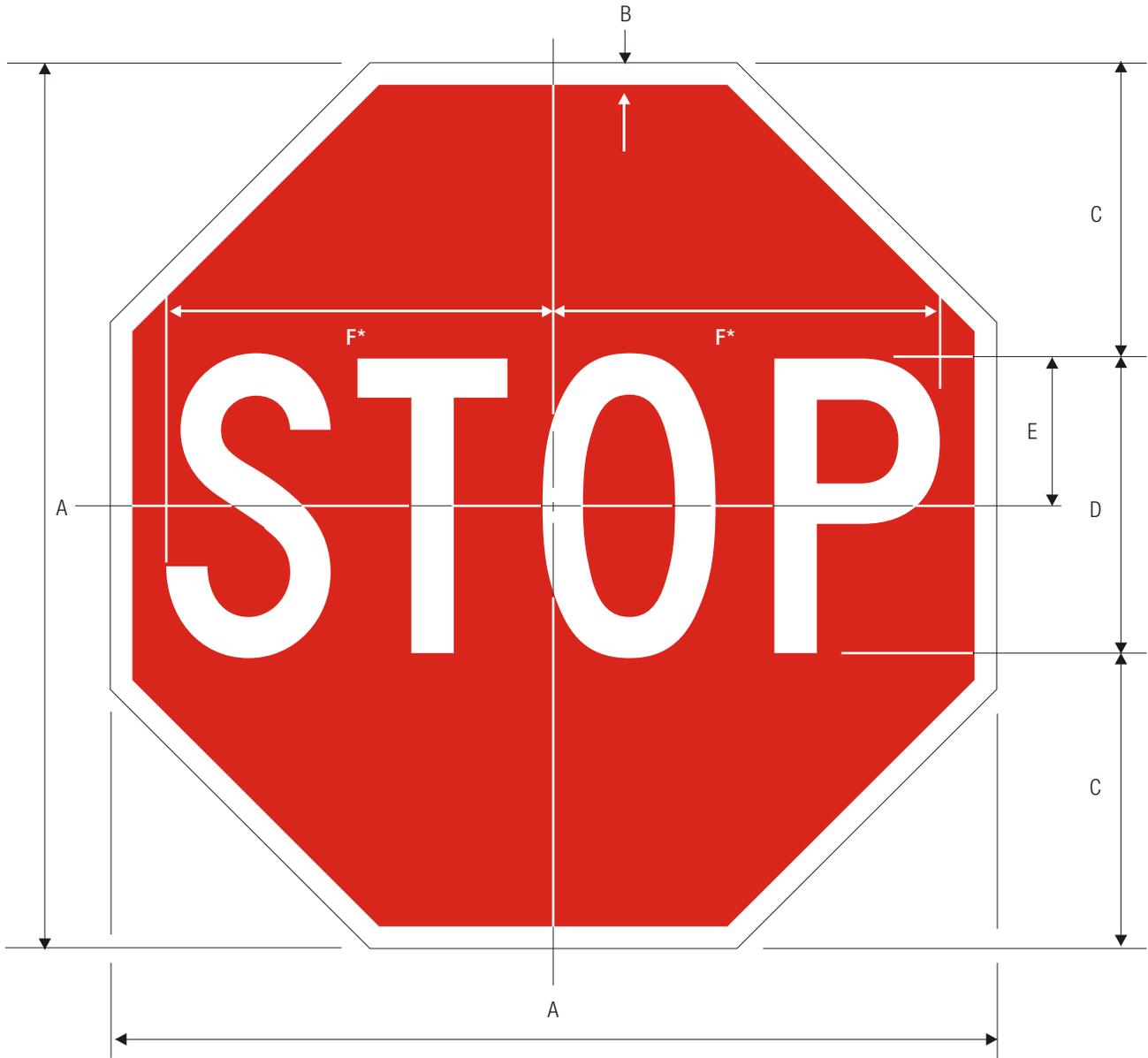
A	B	C	D
18	3	12	1.5
24	3	18	1.5
30	3	24	1.875



A	B	C	D	E	F
36	6	24	6	24	2.25
48	6	36	9	30	3



Street Name Sign: 1.0" Radius, 0.5" Border, Black on White, Highway Font C



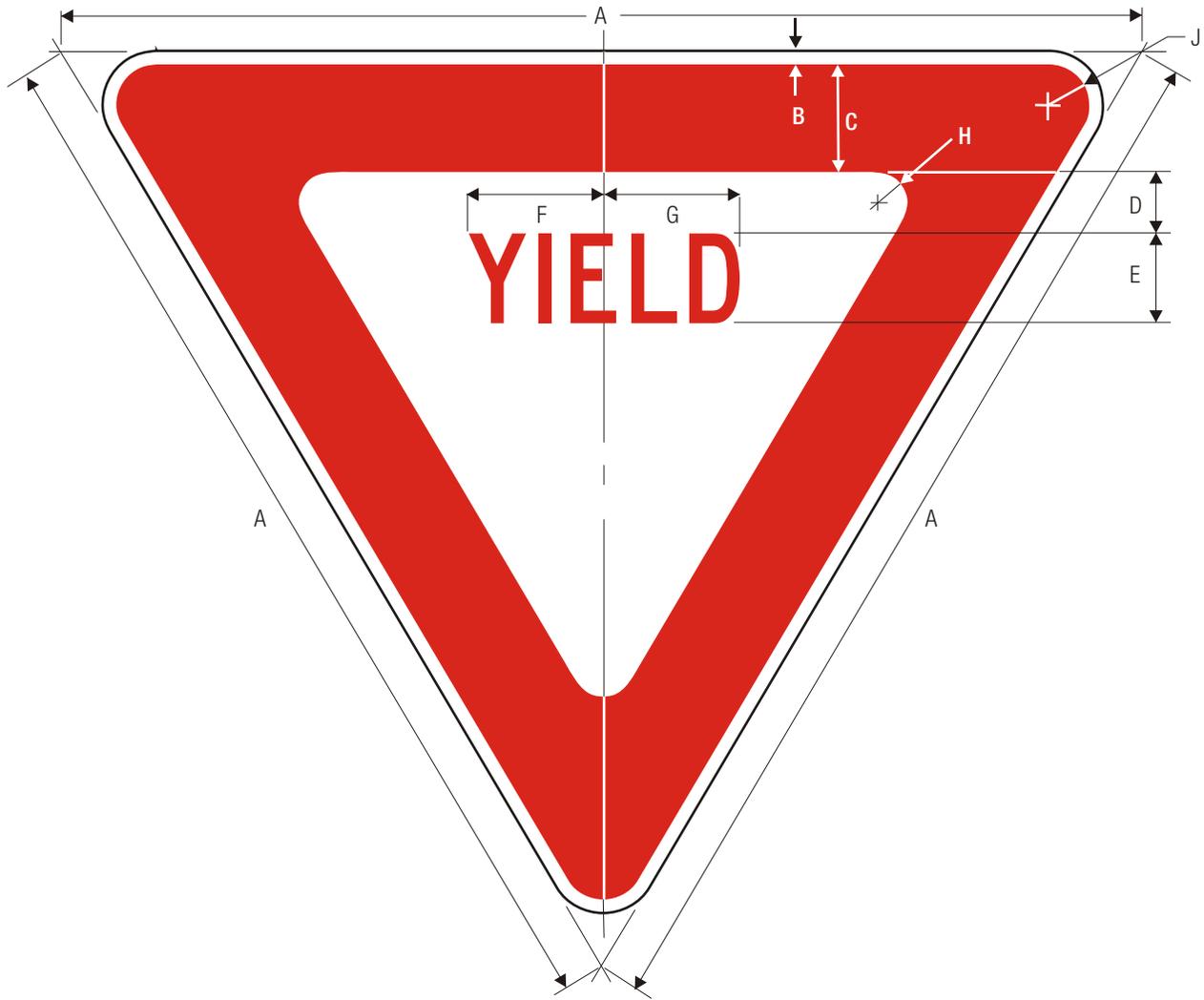
R1-1  
STOP

\*Reduce spacing 40%

A	B	C	D	E	F
18	.375	6	6 C	3	7.75
24	.625	8	8 C	4	10
<b>C</b> 30	.75	10	10 C	5	12.5
36	.875	12	12 C	6	15
48	1.25	16	16 C	8	20

COLORS: LEGEND — WHITE (RETROREFLECTIVE)  
BACKGROUND — RED (RETROREFLECTIVE)

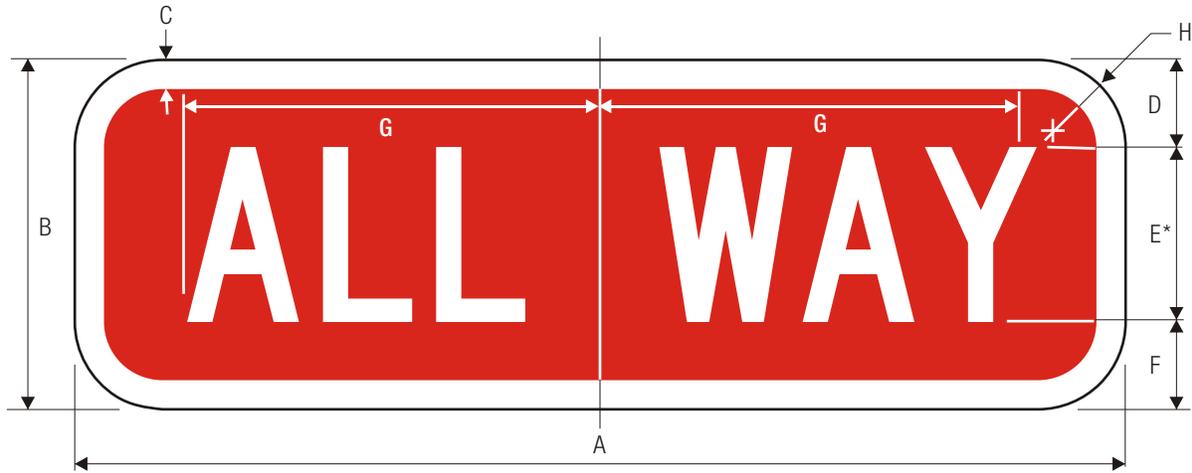
Exhibit D



R1-2  
YIELD

A	B	C	D	E	F	G	H	J
18	.375	2	1	1.5 C	2.375	2.188	.625	1.5
24	.375	3	1.375	2 C	3.25	3	.875	1.5
30	.625	4	1.75	2.5 C	3.938	3.625	.875	1.5
<b>C</b> 36	.75	5	2	3 C	4.688	4.375	1.25	2
48	1	6	2.75	4 C	6.25	5.875	2	3
60	1.5	8	3.5	5 C	7.875	7.25	2.5	4

COLORS: LEGEND – RED (RETROREFLECTIVE)  
BACKGROUND – WHITE (RETROREFLECTIVE)



R1-4  
ALL WAY

\*Series 2000 Standard Alphabets.

	A	B	C	D	E	F	G	H
<b>C</b>	18	6	.5	1.5	3 C	1.5	7	1.5
	24	9	.5	2	5 C	2	11	1.5
	30	12	.75	3	6 C	3	13.25	1.875
	36	15	.75	4	7 C	4	15.771	2.25
	48	18	1	4.5	9 C	4.5	20.415	3

COLORS: LEGEND — WHITE (RETROREFLECTIVE)  
BACKGROUND — RED (RETROREFLECTIVE)



R2-1  
SPEED LIMIT (ENGLISH)

\*Optically space numerals about centerline

	A	B	C	D	E	F	G	H	J	K	L
	18	24	.375	.625	3	3 E	2	8 E	7.188	5.5	1.5
<b>C</b>	24	30	.375	.625	4	4 E	2	10 E	9.563	7.313	1.5
	36	48	.625	.875	6	6 E	5	14 E	14.375	11	2.25
	48	60	.75	1.25	8	8 E	6	16 E	19.125	14.625	3

COLORS: LEGEND — BLACK  
BACKGROUND— WHITE (RETROREFLECTIVE)

Exhibit G