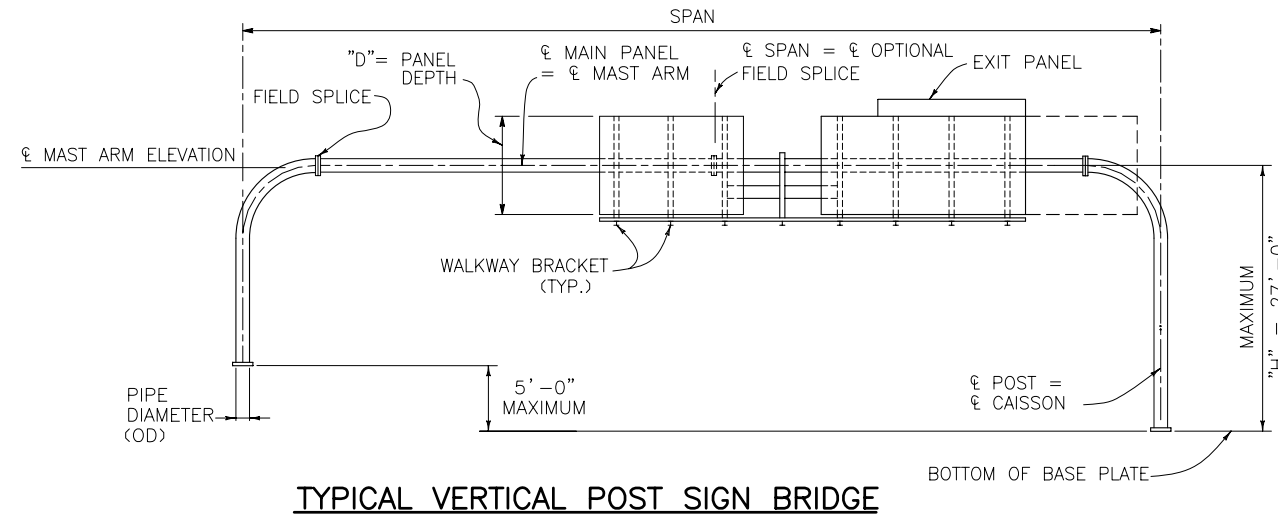


-STATIC SIGN BRIDGE PIPE SELECTION TABLES-



TYPICAL VERTICAL POST SIGN BRIDGE

STRUCTURE SELECTION PROCEDURE FOR SIGN BRIDGES

- DESIGN IS BASED ON A SIGN HEIGHT OF 15' WITH 50% OF THE SPAN LENGTH COVERED UP UNTIL THE CAPACITY OF THE LARGEST POLE SHOWN IS REACHED. BEYOND THIS POINT THE COVERAGE PERCENTAGE DECREASES.
- THE MAXIMUM PRIMARY PANEL HEIGHT IS 14'. ADD THE AREA OF ALL EXIT PANELS TO THE AREA OF ALL PRIMARY PANELS TO CHECK AGAINST MAXIMUM SIGN PANEL AREA.
- OBTAIN THE DESIGN WIND SPEED FROM THE OVERHEAD SIGN X-SECTION SHEETS IN THE ROADWAY PLANS.
- PICK PIPE OD AND SPLIT SIZE FROM THE APPROPRIATE CHART. INCLUDE THE AREA OF ALL SIGN PANELS SHOWN IN THE OVERHEAD SIGN X-SECTION SHEETS WHICH MAY POTENTIALLY BE PLACED ON THE SIGN IN THE FUTURE.
- IF NO POLE/ARM SIZE IS SHOWN FOR A CERTAIN SPAN THIS INDICATES THAT THIS SPAN/SIGN PANEL/HEIGHT COMBINATION EXCEEDS THE LIMITS OF THIS STANDARD.
- THE OVERHEAD SIGN X-SECTION SHEETS INDICATE THE HEIGHT "H", THE SPAN AND THE SIGN PANEL SIZES.

80 MPH WIND

SPAN ≤	MAXIMUM SIGN PANEL AREA (SQ. FT.)	* PIPE POST	
		PIPE OD (IN.)	SPLIT (IN.)
50'	375	12.75	5
60'	450	14	5
70'	525	16	5
80'	600	18	5
90'	675	20	5
100'	750	20	5
110'	825	24	5
120'	900	24	5
130'	780	24	5
140'	700	24	5

*MAST ARM DIAMETER SAME AS POST.

PROCEDURE TO DETERMINE THE DESIGN WIND SPEED

80 MPH IS THE STANDARD DESIGN WIND SPEED FOR THE STATE OF COLORADO. THE STANDARD DESIGN WIND SPEED OF 80 MPH IS TO BE USED AT ALL LOCATIONS EXCEPT THE FOLLOWING:

- USE THE 90 MPH WIND SPEED FOR LOCATIONS WITHIN 4 MILES OF EITHER SIDE OF THE BASE OF THE FOOTHILLS ALONG THE FRONT RANGE OF THE EASTERN SLOPE.
- USE THE 100 MPH WIND SPEED FOR LOCATIONS IN BOULDER COUNTY.

IF THERE ARE QUESTIONS CONCERNING THE PROPER DESIGN WIND SPEED CONTACT THE STAFF BRIDGE BRANCH.

90 MPH WIND

SPAN ≤	MAXIMUM SIGN PANEL AREA (SQ. FT.)	* PIPE POST	
		PIPE OD (IN.)	SPLIT (IN.)
50'	375	14	5
60'	450	16	5
70'	525	18	5
80'	600	20	5
90'	675	24	5
100'	750	24	5
110'	775	24	5
120'	650	24	5
130'	585	24	5
140'	525	24	5

*MAST ARM DIAMETER SAME AS POST.

100 MPH WIND

SPAN ≤	MAXIMUM SIGN PANEL AREA (SQ. FT.)	* PIPE POST	
		PIPE OD (IN.)	SPLIT (IN.)
50'	375	16	5
60'	450	18	5
70'	525	20	5
80'	600	24	5
90'	675	24	5
100'	660	24	5
110'	580	24	5
120'	500	24	5
130'	450	24	5
140'	400	24	5

*MAST ARM DIAMETER SAME AS POST.

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Safety & Traffic Engineering Branch **KCM**

**MONOTUBE
OVERHEAD SIGNS**

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STANDARD PLAN NO.

S-614-50

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