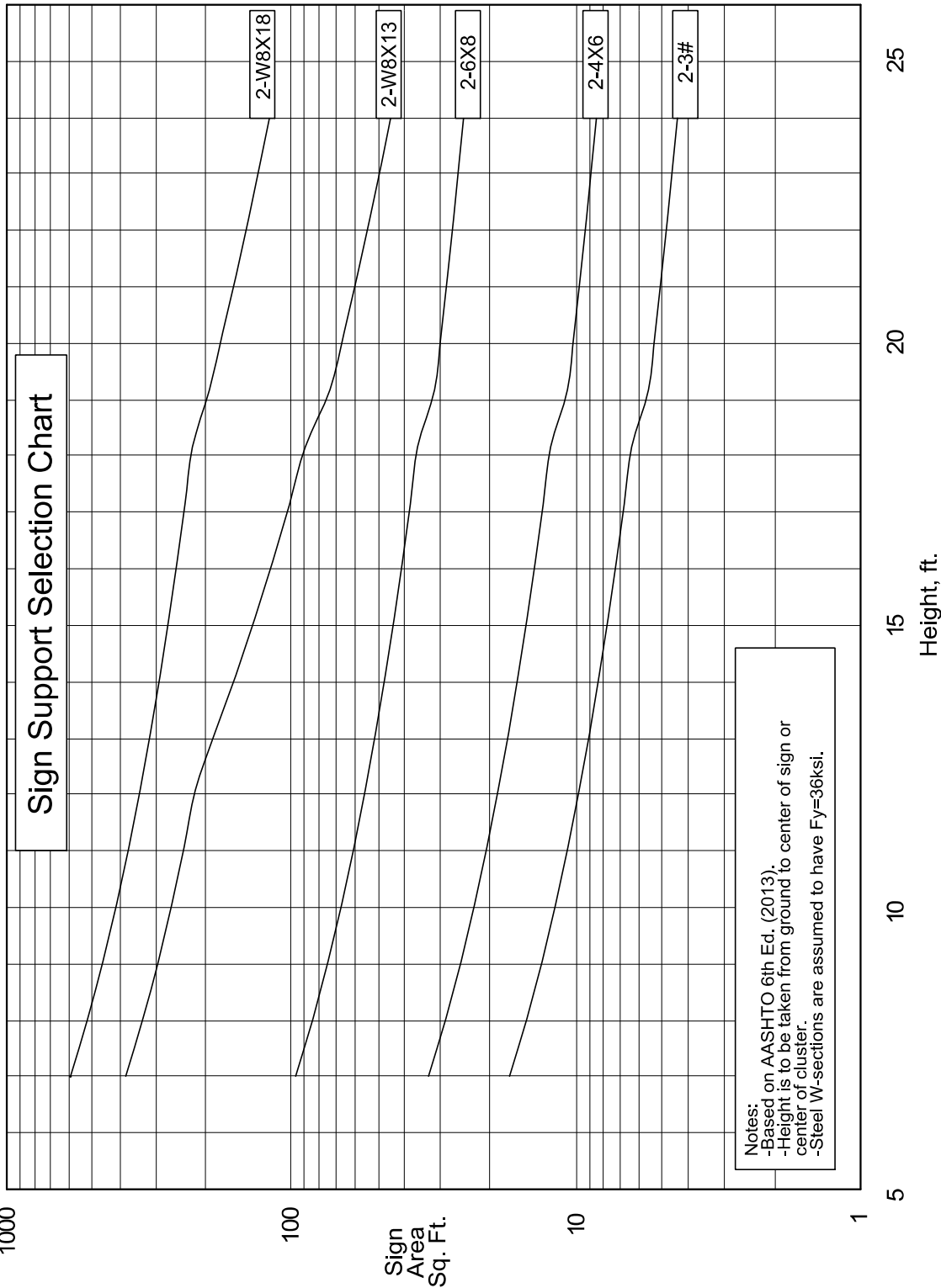


FOR INFORMATION ONLY



Notes:  
 -Based on AASHTO 6th Ed. (2013).  
 -Height is to be taken from ground to center of sign or center of cluster.  
 -Steel W-sections are assumed to have  $F_y=36$ ksi.

Use this standard for signs other than those shown in SIGN-100-SERIES and SIGN-110-SERIES



PREPARED BY  
 DESIGN DIVISION  
 DRAWN BY: MLM  
 CHECKED BY: AJJ

DEPARTMENT DIRECTOR  
 Kirk T. Steudle

APPROVED BY: Randy V. Pittler  
 DIRECTOR, BUREAU OF FIELD SERVICES

APPROVED BY: Mark A. Van Pelt  
 DIRECTOR, BUREAU OF HIGHWAY DEVELOPMENT

MICHIGAN DEPARTMENT OF TRANSPORTATION  
 BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR

SIGN SUPPORT SELECTION CHARTS

04/13/15  
 F.H.W.A. APPROVAL

01/14/15  
 PLAN DATE

SIGN-150-D

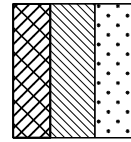
SHEET 1 OF 7

Sign Support Selection Chart: Foreslope Section, 1:4 slope, freeway

Sign Height (ft)	Sign Width (ft)																	
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1.5	4.5	6	7.5	10.5	13.5	15	16.5											
2	6	8	10	12	14	16	18	20	22									
2.5	7.5	10	12.5	15	17.5	20	22.5	25	27.5									
3	9	12	15	18	21	24	27	30	33									
3.5	10.5	14	17.5	21	24.5	28	31.5	35	38.5									
4	12	16	20	24	28	32	36	40	44	48	52	56	60	64	68	72	76	80
4.5	13.5	18	22.5	27	31.5	36	40.5	45	49.5	54	58.5	63	67.5	72	76.5	81	85.5	90
5	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	100
5.5	22	27.5	33	38.5	44	49.5	55	60.5	66	71.5	77	82.5	88	93.5	99	104.5	110	110
6	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	120
6.5	26	32.5	39	45.5	52	58.5	65	71.5	78	84.5	91	97.5	104	110.5	117	123.5	130	130
7	28	35	42	49	56	63	70	77	84	91	98	105	112	119	126	133	140	140
7.5						60	67.5	75	82.5	90	97.5	105	112.5	120	127.5	135	142.5	150
8							72	80	88	96	104	112	120	128	136	144	152	160
8.5							76.5	85	93.5	102	110.5	119	127.5	136	144.5	153	161.5	170
9								90	99	108	117	126	135	144	153	162	171	180
9.5								95	104.5	114	123.5	133	142.5	152	161.5	171	180.5	190
10								110	120	130	140	150	160	170	180	190		
10.5								115.5	126	136.5	147	157.5	168	178.5	189			
11								121	132	143	154	165	176	187	198			
11.5								126.5	138	149.5	161	172.5						
12								132	144	156	168	180						

Notes:

- Based on AASHTO 6th Ed. (2013).
- Numbers in individual cells represent sign areas.
- Based on a lateral offset of 30ft., and a 7ft height from bottom of sign to pavement.



Review SIGN-100-SERIES and SIGN-110-SERIES for support selection prior to using SIGN-150-SERIES. Use this standard for signs other than those shown in SIGN-100-SERIES and SIGN-110-SERIES.

NOT TO SCALE

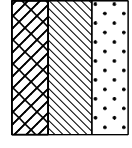
Sign Support Selection Chart: Foreslope Section, 1:4 slope, non-freeway

Sign Height (ft)	Sign Width (ft)																	
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1.5	4.5	6	7.5	9	10.5	12	13.5	15	16.5									
2	6	8	10	12	14	16	18	20	22									
2.5	7.5	10	12.5	15	17.5	20	22.5	25	27.5									
3	9	12	15	18	21	24	27	30	33									
3.5	10.5	14	17.5	21	24.5	28	31.5	35	38.5									
4	12	16	20	24	28	32	36	40	44	48	52	56	60	64	68	72	76	80
4.5	13.5	18	22.5	27	31.5	36	40.5	45	49.5	54	58.5	63	67.5	72	76.5	81	86.5	90
5	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	100
5.5	22	27.5	33	38.5	44	49.5	55	60.5	66	71.5	77	82.5	88	93.5	99	104.5	110	110
6	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	120
6.5	26	32.5	39	45.5	52	58.5	65	71.5	78	84.5	91	97.5	104	110.5	117	123.5	130	130
7	28	35	42	49	56	63	70	77	84	91	98	105	112	119	126	133	140	140
7.5						60	67.5	75	82.5	90	97.5	105	112.5	120	127.5	135	142.5	150
8							72	80	88	96	104	112	120	128	136	144	152	160
8.5							76.5	85	93.5	102	110.5	119	127.5	136	144.5	153	162	170
9								90	99	108	117	126	135	144	153	162	171	180
9.5								95	104.5	114	123.5	133	142.5	152	161.5	171	181	190
10									110	120	130	140	150	160	170	180	190	200
10.5									115.5	126	136.5	147	157.5	168	178.5	189	200	210
11									121	132	143	154	165	176	187	198	209	220
11.5									126.5	138	149.5	161	172.5	184	195.5	207	218.5	230
12									132	144	156	168	180	192	204	216	228	

Notes:

- Based on AASHTO 6th Ed. (2013).
- Numbers in individual cells represent sign areas.
- Based on a lateral offset of 17ft., and a 7ft height from bottom of sign to pavement.

Review SIGN-100-SERIES and SIGN-110-SERIES for support selection prior to using SIGN-150-SERIES  
Use this standard for signs other than those shown in SIGN-100-SERIES and SIGN-110-SERIES



NOT TO SCALE

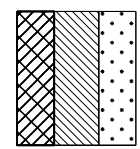
NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.

Sign Support Selection Chart: Foreslope Section, 1:6 slope, freeway

Sign Height (ft)	Sign Width (ft)																	
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1.5	4.5	6	7.5	9	10.5	12	13.5	15	16.5									
2	6	8	10	12	14	16	18	20	22									
2.5	7.5	10	12.5	15	17.5	20	22.5	25	27.5									
3	9	12	15	18	21	24	27	30	33									
3.5	10.5	14	17.5	21	24.5	28	31.5	35	38.5									
4	12	16	20	24	28	32	36	40	44	48	52	56	60	64	68	72	76	80
4.5	13.5	18	22.5	27	31.5	36	40.5	45	49.5	54	58.5	63	67.5	72	76.5	81	85.5	90
5	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	100
5.5	22	27.5	33	38.5	44	49.5	55	60.5	66	71.5	77	82.5	88	93.5	99	104.5	110	110
6	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	120
6.5	26	32.5	39	45.5	52	58.5	65	71.5	78	84.5	91	97.5	104	110.5	117	124	130	130
7	28	35	42	49	56	63	70	77	84	91	98	105	112	119	126	133	140	140
7.5						60	67.5	75	82.5	90	97.5	105	112.5	120	127.5	135	142.5	150
8							72	80	88	96	104	112	120	128	136	144	152	160
8.5							76.5	85	93.5	102	110.5	119	127.5	136	144.5	153	161.5	170
9								90	99	108	117	126	135	144	153	162	171	180
9.5								95	104.5	114	123.5	133	142.5	152	161.5	171	180.5	190
10								110	120	130	140	150	160	170	180	190	200	200
10.5								115.5	126	136.5	147	157.5	168	178.5	189	199.5	210	210
11								121	132	143	154	165	176	187	198	209	220	220
11.5								126.5	138	149.5	161	172.5	184	195.5	207	218.5	230	230
12								132	144	156	168	180	192	204	216	228	240	240

Notes:

- Based on AASHTO 6th Ed. (2013).
- Numbers in individual cells represent sign areas.
- Based on a lateral offset of 30ft., and a 7ft height from bottom of sign to pavement.



Review SIGN-100-SERIES and SIGN-110-SERIES for support selection prior to using SIGN-150-SERIES. Use this standard for signs other than those shown in SIGN-100-SERIES and SIGN-110-SERIES.

NOT TO SCALE

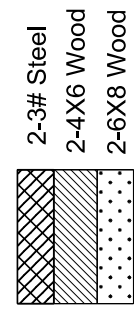
NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.

Sign Support Selection Chart: Foreslope Section, 1:6 slope, non-freeway

Sign Height (ft)	Sign Width (ft)																	
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1.5	4.5	6	7.5	9	10.5	12	13.5	15	16.5									
2	6	8	10	12	14	16	18	20	22									
2.5	7.5	10	12.5	15	17.5	20	22.5	25	27.5									
3	9	12	15	18	21	24	27	30	33									
3.5	10.5	14	17.5	21	24.5	28	31.5	35	38.5									
4	12	16	20	24	28	32	36	40	44	48	52	56	60	64	68	72	76	80
4.5	13.5	18	22.5	27	31.5	36	40.5	45	49.5	54	58.5	63	67.5	72	76.5	81	85.5	90
5	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	100
5.5	22	27.5	33	38.5	44	49.5	55	60.5	66	71.5	77	82.5	88	93.5	99	104.5	110	110
6	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	120
6.5	26	32.5	39	45.5	52	58.5	65	71.5	78	84.5	91	97.5	104	110.5	117	123.5	130	130
7	28	35	42	49	56	63	70	77	84	91	98	105	112	119	126	133	140	140
7.5						60	67.5	75	82.5	90	97.5	105	112.5	120	127.5	135	142.5	150
8							72	80	88	96	104	112	120	128	136	144	152	160
8.5							76.5	85	93.5	102	110.5	119	127.5	136	144.5	153	161.5	170
9							90	99	108	117	126	135	144	153	162	171	180	180
9.5							95	104.5	114	123.5	133	142.5	152	161.5	171	181	190	190
10							110	120	130	140	150	160	170	180	190	200	200	200
10.5							115.5	126	136.5	147	157.5	168	178.5	189	200	210	210	210
11							121	132	143	154	165	176	187	198	209	220	220	220
11.5							126.5	138	149.5	161	172.5	184	195.5	207	218.5	230	230	230
12							132	144	156	168	180	192	204	216	228	240	240	240

Notes:

- Based on AASHTO 6th Ed. (2013).
- Numbers in individual cells represent sign areas.
- Based on a lateral offset of 17ft., and a 7ft height from bottom of sign to pavement.



Review SIGN-100-SERIES and SIGN-110-SERIES for support selection prior to using SIGN-150-SERIES. Use this standard for signs other than those shown in SIGN-100-SERIES and SIGN-110-SERIES.

NOT TO SCALE

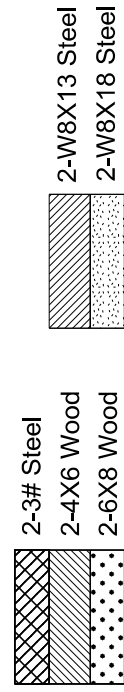
NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.

Sign Support Selection Chart: Foreslope Section, 1:2 slope, Freeway and Non-Freeway

Sign Height (ft)	Sign Width (ft)																	
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1.5	4.5	6	7.5	9	10.5	12	13.5	15	16.5									
2	6	8	10	12	14	16	18	20	22									
2.5	7.5	10	12.5	15	17.5	20	22.5	25	27.5									
3	9	12	15	18	21	24	27	30	33									
3.5	10.5	14	17.5	21	24.5	28	31.5	35	38.5									
4	12	16	20	24	28	32	36	40	44	48	52	56	60	64	68	72	76	80
4.5	13.5	18	22.5	27	31.5	36	40.5	45	49.5	54	58.5	63	67.5	72	76.5	81	85.6	90
5	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	100
5.5	22	27.5	33	38.5	44	49.5	55	60.5	66	71.5	77	82.5	88	93.5	99	104.5	110	110
6	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	120
6.5	26	32.5	39	45.5	52	58.5	65	71.5	78	84.5	91	97.5	104	110.5	117	123.5	130	130
7	28	35	42	49	56	63	70	77	84	91	98	105	112	119	126	133	140	140
7.5																		
8																		
8.5																		
9																		
9.5																		
10																		
10.5																		
11																		
11.5																		
12																		

Notes:

- Based on AASHTO 6th Ed. (2013).
- Numbers in individual cells represent sign areas.
- Based on an offset of 3 ft. from back of guardrail post, and a 7ft height from bottom of sign to pavement.

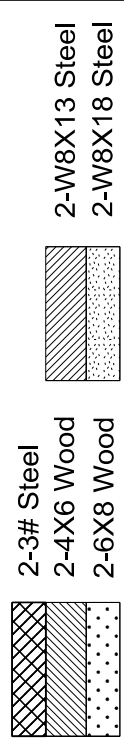


Review SIGN-100-SERIES and SIGN-110-SERIES for support selection prior to using SIGN-150-SERIES. Use this standard for signs other than those shown in SIGN-100-SERIES and SIGN-110-SERIES.

NOT TO SCALE

Sign Support Selection Chart: Backslope Section, Freeway and Non-Freeway

Sign Height (ft)	Sign Width (ft)																	
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1.5	4.5	6	7.5	9	10.5	12	13.5	15	16.5									
2	6	8	10	12	14	16	18	20	22									
2.5	7.5	10	12.5	15	17.5	20	22.5	25	27.5									
3	9	12	15	18	21	24	27	30	33									
3.5	10.5	14	17.5	21	24.5	28	31.5	35	38.5									
4	12	16	20	24	28	32	36	40	44									
4.5	13.5	18	22.5	27	31.5	36	40.5	45	49.5									
5	15	20	25	30	35	40	45	50	55									
5.5	16.5	22	27.5	33	38.5	44	49.5	55	60.5									
6	18	24	30	36	42	48	54	60	66									
6.5	19.5	26	32.5	39	45.5	52	58.5	65	71.5									
7	21	28	35	42	49	56	63	70	77									
7.5	22.5	30	37.5	45	52.5	60	67.5	75	82.5									
8	24	32	40	48	56	64	72	80	88									
8.5	25.5	34	42.5	51	59.5	68	76.5	85	93.5									
9	27	36	45	54	63	72	81	90	99									
9.5	28.5	38	47.5	57	66.5	76	85.5	95	104.5									
10	30	40	50	60	70	80	90	100	110									
10.5	31.5	42	52.5	63	73.5	84	94.5	105	115.5									
11	33	44	55	66	77	88	99	110	121									
11.5	34.5	46	57.5	69	80.5	92	103.5	115	126.5									
12	36	48	60	72	84	96	108	120	132									



Notes:  
 -Based on AASHTO 6th Ed. (2013).  
 -Numbers in individual cells represent sign areas.  
 -Based on a 7ft height from bottom of sign to pavement.

Review SIGN-100-SERIES and SIGN-110-SERIES for support selection prior to using SIGN-150-SERIES  
 Use this standard for signs other than those shown in SIGN-100-SERIES and SIGN-110-SERIES

NOT TO SCALE

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