

EXPOSURE C (See Note 3)								
	Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length			
8'	W8x21	W10x17	2' (3')	8' (7')	25' (24')			
10"	W8x24	W8x18	2' (3')	86" (76")	27'6" (26'6")			
12'	W12x30	W8x21	2' (3')	96" (8')	306" (29')			
14'	W10x33	W10x22	2' (3')	10' (8'6")	33' (31'6")			
16'	W10x39	W10x26	2' (3')	10'6" (9')	35'6" (34')			
18'	W14x43	W12x26	2' (3')	11' (9'6")	38' (36'6")			
20'	W8x48	W12x30	2' (3')	12' (10')	41' (39')			
22'	W12x53	W14x34	2' (3')	13' (11')	44' (42')			
25	W10x60	W18x35	3' (4')	11'6" (10'6")	456" (44'6")			
30'	W10x77	W14x43	3' (4')	13' (11'6")	52' (50'6")			
35	W12x96	W18x50	3' (4')	15' (12'6")	59' (56'6")			
40'	W14x109	W21x55	3' (4')	16'6" (14')	65'6" (63')			

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	EX	POSURE B (S	See Note	2 4)	
	Column and Fo	undation Requireme	ents (Based o	on ASCE 7-10)	
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length
8.	W8x 18	W12x14	2' (3')	7 (6)	24' (23')
10'	W8x21	W10x17	2' (3')	76" (66")	266" (256")
12'	W8x24	W8x 18	2' (3')	8' (7')	29' (28')
14'	W8x28	W8x 21	2' (3')	9' (7'6")	32' (30'6")
16'	W10x33	W8x 21	2' (3')	9'6" (8')	34'6" (33')
18'	W8x35	W10x22	2' (3')	10' (8'6")	37' (35'6")
20'	W10x39	W10x26	2' (3')	10'6" (9')	396" (38")
22'	W10x45	W12x26	2' (3')	11' (9'6")	42' (40'6")
25'	W12x53	W12x30	3' (4')	10' (9')	44' (43')
30'	W12x65	W14x34	3' (4')	11' (10')	50' (49')
35'	W10x77	W16x40	3' (4')	12' (11')	56' (55')
40'	W12x96	W16x50	3' (4')	136" (12')	62'6" (61')

Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
8'	W8x24	W8x21	2' (3')	9' (7'6")	26' (24'6")		
10"	W8x28	W10x22	2' (3')	10' (8'6")	29' (27'6")		
12'	W10x33	W10x26	2' (3')	10'6" (9')	31'6" (30')		
14'	W10x39	W12x26	2' (3')	11'6" (10')	34'6" (33')		
16'	W10x45	W12x30	2' (3')	12' (10'6")	37" (35'6")		
18'	W10x49	W14x30	2' (3')	13' (11')	40' (38')		
20'	W12x53	W14x34	2' (3')	14' (11'6")	43' (40'6")		
22	W14x61	W16x36	2' (3')	15' (12')	46' (43')		
25	W12x72	W21x44	3' (4')	136" (12')	47'6" (46')		
30'	W12x96	W18x55	3' (4')	16' (13'6")	55' (52'6")		
35	W14x109	W21x62	3' (4')	18' (15'6")	62' (59'6")		
40'	W14x132	W24x68	3' (4')	20'6" (17')	69'6" (66')		

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Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8	W8x21	W10x17	2' (3')	8" (6"6")	25' (23'6")	
10'	W8x24	W8x 18	2' (3')	86" (76")	276" (266")	
12'	W8x28	W8x 21	2' (3')	9' (8')	30' (29')	
14'	W10x33	W10x22	2' (3')	10' (8'6")	33' (31'6")	
16'	W10x39	W10x26	2' (3')	10'6" (9')	35'6" (34')	
18'	W14x43	W12x26	2' (3')	11' (9'6")	38' (36'6")	
20'	W8x48	W12x30	2' (3')	11'6" (10')	40'6" (39')	
22"	W10x49	W12x30	2' (3')	12' (10'6")	43' (41'6")	
25'	W10x60	W18x35	3' (4')	11'6" (10'6")	45'6" (44'6")	
30'	W10x77	W14x43	3' (4')	13' (11'6")	52' (50'6")	
35'	W12x96	W18x50	3' (4')	15' (12'6")	59' (56'6")	
40'	W14x109	W21x55	3' (4')	16'6" (14')	65'6" (63')	

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8'	W8x24	W8x21	2' (3')	96" (8")	26'6" (25')	
10"	W10x33	W10x22	2' (3')	10' (9')	29 (28)	
12'	W8x35	W10x26	2' (3')	11' (9'6")	32' (30'6")	
14'	W14x43	W12x26	2' (3')	12' (10')	35' (33')	
16'	W10x49	W14x30	2' (3')	13' (11')	38' (36')	
18'	W12x53	W14x34	2' (3')	14' (11'6")	41' (38'6")	
20'	W10x60	W16x36	2' (3')	15' (12')	44' (41')	
22"	W12x65	W16x40	2' (3')	166" (13')	47'6" (44')	
25	W12x72	W21x44	3' (4')	14' (12')	48' (46')	
30'	W12x96	W21x55	3' (4')	17' (14'6")	56' (53'6")	
35	W12x120	W21x68	3' (4')	196" (166")	63'6" (60'6")	
40'	W14x145	W24x76	3' (4')	22' (18'6")	71' (67'6")	

28 FEET WIDE INSTALLATIONS

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8	W10x22	W8x 18	2' (3')	8' (7')	25' (24')	
10'	W8x24	W8x 21	2' (3')	9' (7'6")	28' (26'6")	
12'	W10x33	W10x22	2' (3')	96" (86")	306" (296")	
14'	W10x33	W14x22	2' (3')	10'6" (9')	336" (32")	
16'	W10x39	W12x26	2' (3')	11' (9'6")	36' (34'6")	
18'	W10x45	W12x26	2' (3')	11'6" (10')	38'6" (37')	
20'	W10x49	W12x30	2' (3')	12' (10'6")	41' (39'6")	
22"	W12x53	W14x34	2' (3')	13' (11')	44' (42')	
25'	W12x65	W16x36	3' (4')	12' (10'6")	46' (44'6")	
30'	W12x79	W14x48	3' (4')	14' (12')	53' (51')	
35'	W12x96	W18x55	3' (4')	16' (13'6")	60' (57'6")	
40'	W12x120	W21x62	3' (4')	18' (15')	67' (64')	

Chart Notes:

1. If the display height is between chart values shown above, use the next highest value.

direction for a distance of 2600 feet or 20 times the structure height, whichever is greater.

- 2. * Requires that braces be placed approximately 10' from ground level spanning both columns. If display is taller than 20' place braces on 10' spacing.
- 3. Wind loading figured at **Exposure** "C" **Open terrain** with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas.

 4. Wind loading figured at **Exposure** "B" **Urban and suburban areas**, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind

Outdoor Scoreboard Installation 3 Column Multi-Section



Nevco, Inc. Greenville, Illinois 62246

Drawing No. 241-0406

Drawn KAB

Date 12/14/2018

Sheet of 2 6

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17 <u>C</u> A	

	EXPOSURE C (See Note 3)						
	Column and Fo	undation Requireme	ents (Based	on ASCE 7-10)			
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
8	W8x24	W8x 18	2' (3')	9' (7'6")	26' (24'6")		
10"	W8x28	W10x22	2' (3')	96" (86")	28'6" (27'6")		
12'	W10x33	W14x22	2' (3')	10'6" (9')	31'6" (30')		
14'	W10x39	W12x26	2' (3')	11' (9'6")	34' (32'6")		
16'	W10x45	W12x26	2' (3')	12' (10')	37' (35')		
18'	W10x49	W12x30	2' (3')	12'6" (10'6")	39'6" (37'6")		
20'	W12x53	W14x34	2' (3')	13'6" (11')	42'6" (40')		
22'	W10x60	W16x36	2' (3')	15' (12')	46' (43')		
25'	W12x72	W14x43	3' (4')	13' (11'6")	47' (45'6")		
30'	W12x87	W18x50	3' (4')	15' (13')	54' (52')		
35'	W12x106	W21x55	3' (4')	17'6" (14'6")	61'6" (58'6")		
40'	W14x120	W21x68	3' (4')	19'6" (16'6")	68'6" (65'6")		

20 FEET WIDE
INSTALLATIONS

120 MPH WIND ZONES

	EXPOSURE B (See Note 4)						
	Column and Fo	undation Requireme	ents (Based	on ASCE 7-10)			
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
8	W8x21	W10x17	2' (3')	7'6" (6'6")	24'6" (23'6")		
10'	W8x24	W8x 18	2 (3)	86" (7')	276" (26')		
12'	W8x28	W8x 21	2 (3)	9' (8')	30' (29')		
14'	W10x33	W10x22	2 (3)	96" (86")	32'6" (31'6")		
16'	W8x35	W14x22	2 (3)	10' (9')	35' (34')		
18'	W8x40	W10x26	2 (3)	11' (9'6")	38' (36'6")		
20'	W10x45	W12x26	2 (3)	11'6" (10')	40'6" (39')		
22"	W10x49	W12x30	2 (3)	12' (10'6")	43' (41'6")		
25'	W10x60	W14x34	3' (4')	11' (10')	45' (44')		
30'	W12x72	W16x40	3' (4')	12'6" (11')	51'6" (50')		
35'	W12x87	W16x50	3' (4')	14' (12')	58' (56')		
40'	W12x106	W18x55	3' (4')	16' (13'6")	65' (62'6")		

Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
8,	W8x28	W10x22	2' (3')	10' (8'6")	27' (25'6")		
10'	W10x33	W10x26	2' (3')	11' (9'6")	30' (28'6")		
12'	W10x39	W12x26	2' (3')	11'6" (10')	32'6" (31')		
14'	W10x45	W12x30	3' (4')	11' (9'6")	34' (32'6")		
16'	W10x49	W14x34	3' (4')	11'6" (10'6")	366" (356")		
18'	W10x60	W16x36	3' (4')	12' (11')	39' (38')		
20'	W12x65	W16x40	3' (4')	13' (11'6")	42' (40'6")		
22'	W12x72	W21x44	3' (4')	14' (12')	45' (43')		
25'	W12x87	W18x50	3' (4')	16' (13'6")	50' (47'6")		
30'	W12x106	W21x62	3' (4')	18'6" (15'6")	576" (546")		
35'	W14x132	W24x68	3' (4')	21'6" (18')	65'6" (62')		
40'	W14x159	W24x84	3' (4')	24' (20')	73' (69')		

24 FEET WIDE
INSTALLATIONS

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8.	W8x24	W8x 18	2' (3')	86" (76")	25'6" (24'6")	
10'	W8x28	W8x 21	2' (3')	9'6" (8')	28'6" (27')	
12'	W10x33	W10x22	2 (3)	10" (8'6")	31' (296")	
14'	W10x39	W10x26	3' (4')	9'6" (8'6")	32'6" (31'6")	
16'	W14x43	W12x26	3' (4')	10' (9')	35' (34')	
18'	W10x49	W12x30	3' (4')	10'6" (9'6")	37'6" (36'6")	
20'	W12x53	W14x34	3' (4')	11' (10')	40' (39')	
22'	W10x60	W18x55	3' (4')	116" (106")	42'6" (41'6")	
25'	W12x72	W16x40	3' (4')	13' (11'6")	47" (45'6")	
30'	W12x87	W18x50	3' (4')	15' (13')	54' (52')	
35'	W12x106	W21x55	3' (4')	176" (146")	61'6" (58'6")	
40'	W14x120	W21x68	3' (4')	196" (166")	68'6" (65'6")	

Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height	Height Unbraced Column Braced Column* Pier Dia. Pier Depth Column L						
8.	W12x30	W10x22	2' (3')	10'6" (9')	276" (26')		
10'	W10x33	W12x26	2' (3')	11'6" (9'6")	306" (286")		
12'	W12x40	W12x30	2' (3')	12' (10'6")	33' (31'6")		
14'	W14x48	W14x34	3' (4')	11' (10')	34' (33')		
16'	W12x53	W16x36	3' (4')	12' (11')	37' (36')		
18'	W14x61	W16x40	3' (4')	13' (11'6")	40' (38'6")		
20'	W12x65	W21x44	3' (4')	14' (12')	43' (41')		
22'	W18x70	W16x50	3' (4')	15' (12'6 ")	46' (43'6")		
25'	W12x87	W18x55	3' (4')	16'6" (14')	50'6" (48')		
30'	W14x109	W21x68	3' (4')	20' (17')	59' (56')		
35'	W14x145	W24x76	3' (4')	23' (19'6")	67' (63'6")		
40'	W18x 175	W24x94	3' (4')	26' (21'6")	75' (70'6")		

28	FEET	WIDE
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Column and Foundation Requirements (Based on ASCE 7-10)					
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length
8.	W8x24	W8x 21	2' (3')	9' (7'6")	26' (24'6")
10'	W8x28	W10x22	2' (3')	10' (8'6")	29' (27'6")
12'	W10x33	W10x26	2' (3')	10'6" (9')	31'6" (30')
14'	W10x39	W12x26	3' (4')	96" (9')	32'6" (32')
16'	W10x45	W12x30	3' (4')	10'6" (9'6")	35'6" (34'6")
18'	W10x49	W14x34	3' (4')	11' (10')	38' (37')
20'	W10x60	W18x35	3' (4')	11'6" (10'6")	40'6" (39'6")
22'	W12x65	W16x40	3' (4')	12' (11')	43' (42')
25'	W12x72	W21x44	3' (4')	136" (116")	476" (456")
30'	W12x96	W18x55	3' (4')	16'6" (13'6")	55'6" (52'6")
35'	W14x109	W21x62	3' (4')	18'6" (16')	62'6" (60')
40'	W14x132	W24x68	3' (4')	21' (18')	70' (67')

Chart Notes:

- 1. If the display height is between chart values shown above, use the next highest value.
- 2. * Requires that braces be placed approximately 10' from ground level spanning both columns. If display is taller than 20' place braces on 10' spacing.
- 3. Wind loading figured at **Exposure "C" Open terrain** with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas.
- 4. Wind loading figured at **Exposure "B" Urban and suburban areas**, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind direction for a distance of 2600 feet or 20 times the structure height, whichever is greater.

Outdoor Scoreboard Installation 3 Column Multi-Section

Drawn

KAB

Nevco, Inc. Greenville, Illinois 62246

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Drawing No. 241-0406 Date 12/14/2018 Sheet of

130 MPH WIND ZONES

	EXPOSURE C (See Note 3)					
	Column and Fo	undation Requireme	ents (Based	on ASCE 7-10)		
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8.	W8x24	W8x21	2 (3)	96" (8')	26'6" (25')	
10'	W10x33	W10x22	2 (3)	10' (9')	29' (28')	
12'	W8x35	W10x26	2 (3)	11' (9'6")	32" (30'6")	
14'	W14x43	W12x26	2 (3)	12' (10')	35' (33')	
16'	W14x48	W12x30	2 (3)	12'6" (10'6")	376" (356")	
18'	W12x53	W14x34	2 (3)	14' (11'6")	41' (38'6")	
20'	W10x60	W16x36	2 (3)	15' (12')	44' (41')	
22"	W12x65	W16x40	2 (3)	166" (13')	47'6" (44')	
25'	W12x79	W16x50	3' (4')	146" (12')	48'6" (46')	
30'	W12x96	W18x55	3' (4')	17' (14')	56' (53')	
35'	W14x109	W21x62	3' (4')	19' (16')	63' (60')	
40'	W14x145	W24x68	3' (4')	216" (18')	70'6" (67')	

20 FEET WIDE
INSTALLATIONS

	EXPOSURE B (See Note 4)					
	Column and Fo	undation Requireme	ents (Based	on ASCE 7-10)		
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8'	W10x22	W8x 18	2' (3')	8' (7')	25' (24')	
10'	W8x24	W8x 18	2'(3')	9' (76")	28' (26'6")	
12'	W10x33	W10x22	2 (3)	96" (86")	306" (296")	
14'	W10x33	W14x22	2'(3')	10' (9')	33' (32')	
16'	W10x39	W10x26	2' (3')	11' (9'6")	36' (34'6")	
18'	W10x45	W12x26	2 (3)	11'6" (10')	386" (37')	
20'	W10x49	W12x30	2'(3')	12' (10'6")	41' (39'6")	
22'	W10x54	W14x34	2'(3')	13'6" (11')	44'6" (42')	
25'	W12x65	W16x36	3' (4')	12' (106")	46' (44'6")	
30'	W12x79	W21x44	3' (4')	13'6" (12')	52'6" (51')	
35'	W12x96	W18x55	3' (4')	15'6" (13')	596" (57')	
40'	W14x109	W21x62	3' (4')	176" (15')	66'6" (64')	

Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
8.	W12x30	W14x22	2'(3')	10'6" (9')	276" (26')		
10'	W14x38	W12x26	2 (3)	11'6" (10')	306" (29')		
12'	W12x40	W12x30	2 (3)	12'6" (10'6")	33'6" (31'6")		
14'	W10x49	W14x34	3'(4')	11'6" (10'6")	34'6" (33'6")		
16'	W12x53	W16x36	3' (4')	12'(11')	37' (36')		
18'	W14x61	W16x40	3' (4')	13' (116")	40' (38'6")		
20'	W12x65	W21x44	3' (4')	14' (12')	43' (41')		
22"	W12x79	W16x50	3'(4')	15'6" (13')	46'6" (44')		
25'	W12x96	W21x55	3'(4')	17'6" (15')	51'6" (49')		
30'	W14x109	W21x68	3' (4')	20'6" (17'6")	59'6" (56'6")		
35'	W14x145	W24x76	3' (4')	23'6" (19'6")	67'6" (63'6")		
40'	W14x176	W24x94	3' (4')	266" (22')	75'6" (71')		
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24 FEET WIDE
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INSTALLATIONS

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8'	W8x24	W8x 21	2' (3')	9' (8')	26' (25')	
10'	W12x30	W10x22	2 (3)	10' (8'6")	29' (27'6")	
12'	W10x33	W10x26	2 (3)	10'6" (9')	31'6" (30')	
14'	W10x39	W12x26	3' (4')	10' (9')	33' (32')	
16'	W10x45	W12x30	3' (4')	10'6" (9'6")	35'6" (34'6")	
18'	W10x49	W14x34	3' (4')	11' (10')	38' (37')	
20'	W10x60	W18x35	3' (4')	11'6" (10'6")	40'6" (39'6")	
22'	W12x65	W16x40	3' (4')	12'6" (11')	43'6" (42')	
25'	W12x79	W14x48	3' (4')	14'6" (12')	48'6" (46')	
30'	W12x96	W18x55	3' (4')	16'6" (14')	55'6" (53')	
35'	W14x109	W21x62	3' (4')	19' (16')	63' (60')	
40'	W14x145	W24x68	3' (4')	21'6" (18')	70'6" (67')	

Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
8	W10x33	W10x26	2' (3')	11' (9'6")	28' (26'6")		
10'	W10x39	W12x26	2'(3')	12' (10'6")	31' (29'6")		
12'	W14x43	W14x30	2'(3')	13'6" (11')	346" (32')		
14'	W12x53	W18x35	3' (4')	12' (10'6")	35' (33'6")		
16'	W10x60	W16x40	3' (4')	13' (116")	38' (36'6")		
18'	W12x65	W21x44	3' (4')	14' (12')	41' (39')		
20'	W12x72	W16x50	3' (4')	15'6" (13')	446" (42')		
22'	W18x86	W18x55	3' (4')	16'6" (14')	476" (45')		
25'	W12x96	W21x55	3' (4')	18'6" (15'6")	52'6" (49'6")		
30'	W14x120	W24x68	3' (4')	22'6" (18'6")	61'6" (57'6")		
35'	W14x159	W24x84	3' (4')	256" (216")	69'6" (65'6")		
40'	W18x 192	W21x101	3' (4')	29' (24')	78' (73')		

28 FEET WIDE **INSTALLATIONS**

Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W12x26	W8x 21	2' (3')	9'6" (8')	266" (25")
10'	W10x33	W10x22	2' (3')	10'6" (9')	296" (28')
12'	W10x39	W12x26	2 (3)	11' (9'6")	32' (30'6")
14'	W14x43	W12x30	3' (4')	10'6" (9'6")	33'6" (32'6")
16'	W10x49	W14x34	3' (4')	11' (10')	36' (35')
18'	W12x53	W18x35	3' (4')	11'6" (10'6")	38'6" (37'6")
20'	W14x61	W16x40	3' (4')	12'6" (11')	41'6" (40')
22'	W12x65	W14x43	3' (4')	13'6" (11'6")	44'6" (42'6")
25'	W12x79	W16x50	3' (4')	15' (12'6")	49' (46'6")
30'	W24x 104	W21x55	3' (4')	18' (15')	57' (54')
35'	W14x 120	W21x68	3' (4')	20'6" (17'6")	64'6" (61'6")
40'	W14x145	W24x76	3' (4')	236" (196")	72'6" (68'6")

Chart Notes:

- 1. If the display height is between chart values shown above, use the next highest value.
- 2. * Requires that braces be placed approximately 10' from ground level spanning both columns. If display is taller than 20' place braces on 10' spacing.
- 3. Wind loading figured at **Exposure "C" Open terrain** with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas.

 4. Wind loading figured at **Exposure** "B" - **Urban and suburban areas**, wooded areas, or other terrain with numerous
- closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind direction for a distance of 2600 feet or 20 times the structure height, whichever is greater.

Outdoor Scoreboard Pier Installation 3 Column Multi-Section

Drawn

KAB

Nevco, Inc. Greenville, Illinois 62246

Drawing No. 241-0406

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Date 12/14/2018

150 MPH WIND ZONES

	EXPOSURE C (See Note 3)							
	Column and Fo	undation Requireme	ents (Based	on ASCE 7-10)				
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length			
8'	W12x30	W10x22	2 (3)	10'6" (9')	276 (26)			
10"	W10x33	W12x26	2 (3)	11'6" (9'6")	30'6" (28'6")			
12'	W12x40	W12x30	2 (3)	12'6" (10'6")	33'6" (31'6")			
14'	W14x48	W14x34	2 (3)	136" (116")	36'6" (34'6")			
16'	W12x53	W18x35	2 (3)	15' (12')	40' (37')			
18'	W14x61	W16x40	2 (3)	16'6" (13')	436" (40')			
20'	W12x65	W21x44	2 (3)	18' (14')	47' (43')			
22	W12x79	W18x50	2 (3)	20' (15'6")	51' (46'6")			
25	W12x96	W18x55	3' (4')	17" (14'6")	51' (48'6")			
30'	W14x109	W21x68	3' (4')	20' (16'6")	59 (556")			
35	W14x132	W24x76	3' (4')	23 (19)	67' (63')			
40'	W14x159	W24x94	3 (4')	256" (216")	74'6" (70'6")			

20 FEET WIDE **INSTALLATIONS**

EXPOSURE B (See Note 4)						
	Column and Fo	undation Requireme	ents (Based	on ASCE 7-10)		
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8'	W8x24	W8x21	2' (3')	9' (7'6")	26' (24'6")	
10"	W8x28	W10x22	2' (3')	10' (8'6")	29' (27'6")	
12'	W10x33	W10x26	2' (3')	10'6" (9')	31'6" (30')	
14'	W10x39	W12x26	2' (3')	11'6" (10')	346" (33')	
16'	W10x45	W12x30	2' (3')	12' (10'6")	37' (35'6")	
18'	W10x49	W14x34	2' (3')	13' (11')	40' (38')	
20'	W10x54	W14x34	2' (3')	14' (11'6")	43' (40'6")	
22'	W12x65	W16x40	2' (3')	16' (12'6")	47' (43'6")	
25	W12x72	W21x44	3' (4')	14' (12')	48' (46')	
30'	W12x96	W18x55	3' (4')	16' (13'6")	55' (52'6")	
35	W14x109	W21x62	3' (4')	186" (156")	62'6" (59'6")	
40'	W14x132	W24x68	3' (4')	21' (17'6")	70' (66'6")	

	Column and Fo	undation Requireme	ents (Based	on ASCE 7-10)	
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W10x33	W12x26	2' (3')	11'6" (10')	286" (27")
10"	W12x40	W12x30	2' (3')	13' (11')	32' (30')
12'	W14x48	W14x34	2' (3')	15' (12')	36' (33')
14'	W10x60	W16x40	2' (3')	17' (13')	40' (36')
16'	W14x61	W21x44	2'(3')	186" (146")	43'6" (39'6")
18'	W12x72	W16x50	2'(3')	206" (156")	476" (426")
20"	W14x82	W18x55	2'(3')	22' (17')	51' (46')
22"	W12x96	W21x55	3' (4')	186" (156")	49'6" (46'6")
25	W14x109	W21x68	3' (4')	21' (17'6")	55' (51'6")
30'	W18x143	W24x76	3' (4')	25' (20'6")	64" (59'6")
35	W18x175	W24x94	3' (4')	286" (236")	72'6" (67'6")
40'	W14x211	W24x104	3' (4')	32' (26'6")	81' (756")

24 FEET WIDE
INSTALLATIONS

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8'	W8x28	W10x22	2' (3')	10' (8'6")	27' (25'6")	
10"	W10x33	W10x26	2' (3')	11' (9'6")	30' (28'6")	
12'	W10x39	W12x26	2' (3')	12' (10'6")	33' (31'6")	
14'	W14x48	W14x30	2' (3')	13'6" (11')	36'6" (34')	
16'	W12x53	W18x35	2' (3')	146" (12')	39'6" (37')	
18'	W10x60	W16x40	2' (3')	16' (12'6")	43' (39'6")	
20'	W12x65	W14x43	2' (3')	176" (136")	46'6" (42'6")	
22"	W12x72	W16x50	3' (4')	146" (126")	456" (436")	
25	W12x96	W18x55	3' (4')	17' (14')	51' (48')	
30'	W14x109	W21x68	3' (4')	20' (16'6")	59' (59'6")	
35	W14x132	W24x76	3' (4')	23' (19')	67' (63')	
40'	W14x159	W24x94	3' (4')	26' (21'6")	75' (70'6 ")	

Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8'	W14x38	W12x26	2'(3')	12' (10'6")	29 (276")	
10"	W14x43	W14x34	2' (3')	14' (11'6")	33' (30'6")	
12'	W12x53	W16x36	2 (3)	16' (12'6")	37 (336")	
14'	W14x61	W14x43	2 (3)	18' (14')	41' (37')	
16'	W16x67	W16x50	2' (3')	20'6" (15'6")	45'6" (40'6")	
18'	W18x76	W18x55	2' (3')	22' (17')	49' (44')	
20'	W18x86	W21x55	2' (3')	24' (18'6")	53 (476")	
22	W16x100	W21x62	3' (4')	20' (16'6")	51' (47'6")	
25	W14x109	W24x68	3' (4')	22" (18'6")	56' (52'6")	
30'	W14x145	W24x84	3' (4')	27" (22"6")	66' (61'6")	
35	W18x192	W24x104	3' (4')	31' (25'6")	75 (696")	
40	W14x233	W24x131	3' (4')	35' (29')	84' (78')	

28 FEET WIDE
INSTALLATIONS

Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W12x30	W14x22	2' (3')	10'6" (9')	276" (26')
10"	W14x38	W12x26	2' (3')	11'6" (10')	306" (29')
12'	W14x43	W12x30	2' (3')	126" (106")	336" (316")
14'	W10x49	W14x34	2' (3')	14' (11'6")	37' (34'6")
16'	W12x53	W16x36	2' (3')	16' (12'6")	41' (37'6")
18'	W14x61	W14x43	2' (3')	176" (136")	44'6" (40'6")
20'	W12x72	W14x48	2' (3')	19' (14'6")	48' (43'6")
22'	W12x79	W18x50	3' (4')	16' (13'6")	47' (44'6")
25	W12x96	W21x55	3' (4')	17'6" (15')	51'6" (49')
30'	W14x120	W24x68	3' (4')	21'6" (18')	60'6" (57")
35	W14x195	W24x84	3' (4')	25' (20'6")	69' (64'6")
40'	W14x176	W21x101	3' (4')	28' (23'6")	77' (72'6")

Chart Notes:

1. If the display height is between chart values shown above, use the next highest value.

direction for a distance of 2600 feet or 20 times the structure height, whichever is greater.

2. * Requires that braces be placed approximately 10' from ground level spanning both columns. If display is taller

than 20' place braces on 10' spacing.

3. Wind loading figured at **Exposure "C" - Open terrain** with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas.

4. Wind loading figured at **Exposure "B" - Urban and suburban areas**, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind

Outdoor Scoreboard Pier Installation 3 Column Multi-Section

Nevco, Inc. Greenville, Illinois 62246

Drawing No. 241-0406

Drawn KAB

12/14/2018

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EXPOSURE C (See Note 3)						
	Column and Fo	undation Requireme	ents (Based	on ASCE 7-10)		
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8'	W16x36	W12x26	2' (3')	12' (10')	29' (27')	
10'	W12x40	W14x30	2' (3')	13'6" (11')	32'6" (30')	
12'	W10x49	W18x35	2' (3')	156" (12')	36'6" (33')	
14'	W10x60	W16x40	2' (3')	17'6" (13'6")	40'6" (36'6")	
16'	W12x65	W21x44	2' (3')	19' (14'6")	44' (39'6")	
18'	W12x72	W18x50	2' (3')	21' (16')	48' (43')	
20'	W18x86	W18x55	2' (3')	22'6" (17'6")	51'6" (46'6")	
22'	W18x97	W21x62	2' (3')	25'6" (19'6")	56'6" (50'6")	
25'	W14x109	W21x68	3' (4')	21'6" (18')	55'6" (52')	
30'	W18x143	W24x84	3' (4')	25' (21')	64' (60')	
35'	W14x176	W21x101	3' (4')	29' (24')	73' (68')	
40'	W14x211	W24x117	3' (4')	32'6" (27')	81'6" (76')	

20 FEET WIDE **INSTALLATIONS**

EXPOSURE B (See Note 4)						
	Column and Fo	undation Requireme	ents (Based	on ASCE 7-10)		
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8'	W12x30	W10x22	2' (3')	10'6" (9')	27'6" (26')	
10'	W10x33	W10x26	2' (3')	11' (9'6")	30' (28'6")	
12'	W12x40	W12x30	2' (3')	12' (10'6")	33' (31'6")	
14'	W14x48	W14x34	2' (3')	13'6" (11')	36'6" (34')	
16'	W12x53	W18x35	2' (3')	15' (12')	40' (37')	
18'	W14x61	W16x40	2' (3')	166" (13')	43'6" (40')	
20'	W12x65	W21x44	2' (3')	18' (14')	47' (43')	
22'	W12x79	W18x50	2' (3')	20' (15'6")	51' (46'6")	
25'	W12x96	W21x55	3' (4')	176" (146")	51'6" (48'6")	
30'	W14x109	W21x68	3' (4')	20' (17')	59' (56')	
35'	W14x145	W24x76	3' (4')	23' (19'6")	67" (63'6")	
40'	W14x176	W24x94	3' (4')	26' (22')	75' (71')	

	Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W12x40	W14x34	2' (3')	14'6" (11'6")	31'6" (28'6")
10'	W14x48	W16x36	2' (3')	166" (13')	356" (32')
12'	W14x61	W21x44	2' (3')	19' (14'6")	40' (35'6")
14'	W16x67	W18x50	2' (3')	21'6" (16'6")	44'6" (39'6")
16'	W18x76	W18x55	2' (3')	24' (18')	49' (43')
18'	W18x86	W21x62	2' (3')	26' (20')	53' (47')
20'	W21x101	W21x68	2' (3')	28'6" (21'6")	57'6" (50'6")
22'	W24x104	W24x68	3' (4')	23' (19'6")	54' (50'6")
25'	W24x131	W24x84	3' (4')	27" (22'6")	61' (56'6")
30'	W18x175	W24x104	3' (4')	31'6" (26')	70'6" (65')
35'	W14x233	W24x131	3' (4')	36' (30')	80' (74')
40'	W18x258	W24x146	3' (4')	41' (336")	90' (82'6")

24 FEET WIDE
INSTALLATIONS

Column and Foundation Requirements (Based on ASCE 7-10)					
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W10x33	W12x26	2' (3')	11'6" (10')	28'6" (27')
10'	W12x40	W12x30	2' (3')	13' (11')	32' (30')
12'	W14x48	W14x34	2' (3')	15' (12')	36' (33')
14'	W12x53	W16x40	2' (3')	17' (13')	40' (36')
16'	W14x61	W21x44	2' (3')	18'6" (14'6")	43'6" (39'6")
18'	W12x72	W16x50	2' (3')	20'6" (15'6")	476" (42'6")
20'	W14x82	W18x55	2' (3')	22' (17')	51' (46')
22'	W12x96	W21x55	3' (4')	18'6" (15'6")	49'6" (46'6")
25'	W14x109	W21x68	3' (4')	21'6" (18')	55'6" (52')
30'	W18x143	W24x84	3' (4')	25' (21')	64' (60')
35'	W18x175	W21x101	3' (4')	29' (24')	73' (68')
40'	W14x211	W24x117	3' (4')	32'6" (27')	81'6" (76')
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Column and Foundation Requirements (Based on ASCE 7-10)						
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8'	W14x43	W14x34	2' (3')	156" (12')	32'6" (29')	
10'	W12x53	W16x40	2' (3')	18' (14')	37' (33')	
12'	W14x61	W14x48	2' (3')	20'6" (15'6")	41'6" (36'6")	
14'	W14x74	W18x55	2' (3')	23 (176")	46' (40'6")	
16'	W18x86	W21x55	2' (3')	26' (19'6")	51' (44'6")	
18'	W18x97	W21x68	2' (3')	28'6" (21'6")	55'6" (48'6")	
20'	W21x101	W24x68	2' (3')	31' (23'6")	60' (52'6")	
22'	W24x117	W24x76	3' (4')	256" (21')	56'6" (52')	
25'	W18x143	W24x94	3' (4')	28' (23')	62' (57')	
30'	W21x182	W24x117	3' (4')	34'6" (28'6")	73'6" (67'6")	
35'	W18x234	W24x146	3' (4')	39'6" (32'6")	83'6" (76'6")	
40'	W18x283	W24x176	3' (4')	44'6" (36'6")	93'6" (85'6")	
		_				

28 FEET WIDE **INSTALLATIONS**

Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W16x36	W12x26	2' (3')	12 (10'6")	29' (27'6")
10'	W14x43	W14x34	2' (3')	14' (11'6")	33' (30'6")
12'	W12x53	W16x36	2' (3')	16' (12'6")	37' (33'6")
14'	W14x61	W16x40	2' (3')	18' (14')	41' (37')
16'	W16x67	W16x50	2' (3')	20' (15'6")	45' (40'6")
18'	W18x76	W18x55	2' (3')	22' (17')	49' (44')
20'	W18x86	W21x55	2' (3')	24' (18'6")	53' (47'6")
22 ^t	W16x100	W21x62	3' (4')	20' (16'6")	51' (4 7'6")
25'	W14x109	W24x68	3' (4')	22'6" (18'6")	56'6" (52'6")
30'	W18x158	W24x94	3' (4')	27 (226")	66' (61'6")
35'	W18x192	W24x104	3' (4')	31'6" (26')	75'6" (70')
40'	W14x233	W24x131	3' (4')	35'6" (29'6")	84'6" (78'6")

Chart Notes:

4

1. If the display height is between chart values shown above, use the next highest value.

2. * Requires that braces be placed approximately 10' from ground level spanning both columns. If display is taller

than 20' place braces on 10' spacing.

3. Wind loading figured at **Exposure** "C" - **Open terrain** with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone areas.

4. Wind loading figured at **Exposure** "B" - **Urban and suburban areas**, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. These areas prevail in the upwind direction for a distance of 2600 feet or 20 times the structure height, whichever is greater.

Outdoor Scoreboard Pier Installation 3 Column Multi-Section

Nevco, Inc. Greenville, Illinois 62246

Drawing No. 241-0406

Drawn KAB Date 12/14/2018

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