

Rev A

SCOREBOARD DIMENSIONS AND SPECIFICATIONS


MODEL	WIDTH	HEIGHT	WEIGHT	WEIGHT W/ETN	Max "A"	Min "A"
1604, 1604PC	28'	8' 3/16"	650	712	20'	14'
1606, 1606PC, 3615, 3617, 3618, 3619, 7630, 7631, 7632	24'	8' 3/16"	570	632	16'	13'
3685, 7685	24'	8' 3/16"	N/A	740	16'	13'
7605, 7615, 7625	24'	10' 6 9/32"	730	792	16'	13'
8601, 8602	24'	8' 3/16"	970	1032	16'	13'
3621	20'	8' 3/16"	520	582	18'	12'
3682	20'	8' 3/16"	N/A	690	18'	12'

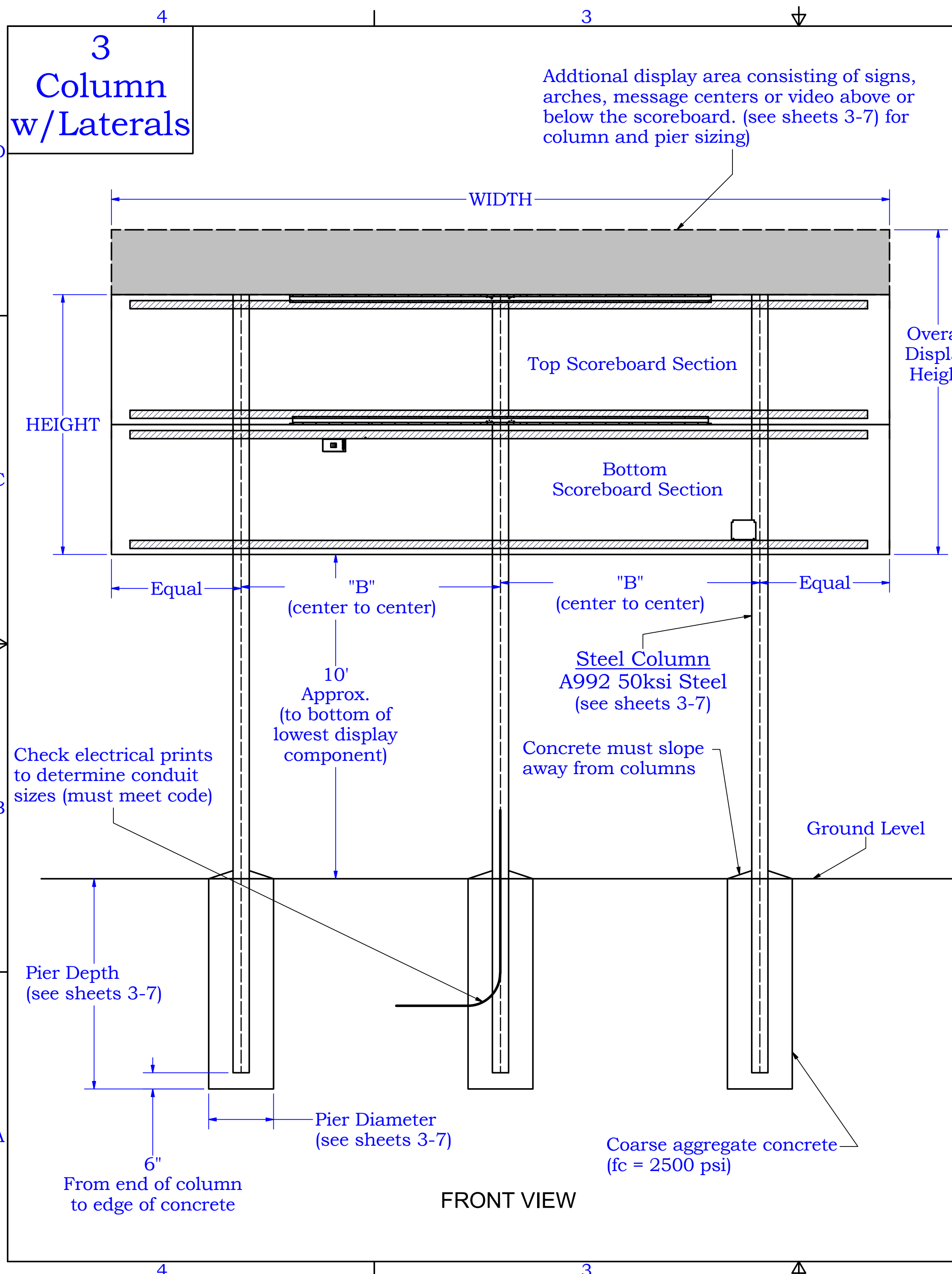
General Notes:

1. Column steel to be grade A992 (50 ksi steel minimum).
2. Bracing steel to be ASTM A500 Grade B minimum (see 241-0415).
3. Minimum bolt grade: A307
4. All welds to conform to AWS standards
5. The dimensions in the charts on sheets 3-7 are calculated using the requirements specified in IBC 2012, and the Manual of Steel Construction (13th Edition). Soil lateral bearing pressure is considered to be 150 psf/f.
6. Check with the local building authority to determine the installation sites wind zone and risk category as specified in IBC 2012 and ASCE 7-10. For the purposes of these installation prints, Risk Category I shall apply to an installation where the scoreboard is more than 1.5 x the overall height away from the nearest spectator section. Risk Category II shall apply to all other installations.
7. The weights of signs to be calculated using 4.3 lb/sq. ft of sign area.
8. The weights of Nevco message centers to be calculated using 8.5 lb/sq ft.
9. The weights of Nevco video displays to be calculated using 9.5 lbs/sq. ft.
10. The weights of Nevco arches to be calculated using 7.7 lbs/sq. ft.

Important. Read before installation.

This is not an engineered drawing. It is intended for representational purposes only. The dimensions called out on this drawing are intended to be used as a guide only, and are not intended to be suitable for all conditions. Adding signs or other components around the scoreboard beyond the scope of this drawing or increasing the display height from the ground will affect the installation requirements. Nevco recommends that you consult a professional engineer or architect familiar with the area before attempting installation. They can verify that the selected mounting beams or posts along with the brackets, screws, and other hardware items provided by others or Nevco are adequate for your local soil conditions, wind loads and other local codes. If procedures are used that are not covered in this drawing, careful analysis of the installation is urged.


Outdoor Scoreboard Pier Installation 2/3 Column With Laterals		 Nevco, Inc. Greenville, Illinois 62246		
				Drawing No. 241-0407
Drawn	KAB	Date	12/14/2018	Sheet 1 of 9



SCOREBOARD DIMENSIONS AND SPECIFICATIONS						
Model	WIDTH	HEIGHT	WEIGHT	WEIGHT W/ETN	MAX "B"	MIN "B"
1603, 1603PC	36'	9' 3/16"	930	992	15'	12'
3616, 7616	36'	10' 3/16"	1020	1220	15'	12'
3657	32'	10' 3/16"	890	952	12'	11'
3688, 7688	32'	8' 3/16"	N/A	930	12'	11'
3620, 7620	32'	8' 3/16"	760	822	12'	11'

- General Notes:
1. Column steel to be grade A992 (50 ksi steel minimum).
 2. Bracing steel to be ASTM A500 Grade B minimum (see 241-0415).
 3. Minimum bolt grade: A307
 4. All welds to conform to AWS standards
 5. The dimensions in the charts on sheets 3-7 are calculated using the requirements specified in IBC 2012, and the Manual of Steel Construction (13th Edition). Soil lateral bearing pressure is considered to be 150 psf/f.
 6. Check with the local building authority to determine the installation sites wind zone and risk category as specified in IBC 2012 and ASCE 7-10. For the purposes of these installation prints, Risk Category I shall apply to an installation where the scoreboard is more than 1.5 x the overall height away from the nearest spectator section. Risk Category II shall apply to all other installations.
 7. The weights of signs to be calculated using 4.3 lb/sq. ft of sign area.
 8. The weights of Nevco message centers to be calculated using 8.5 lb/sq. ft.
 9. The weights of Nevco video displays to be calculated using 9.5 lbs/sq. ft.
 10. The weights of Nevco arches to be calculated using 7.7 lbs/sq. ft.

Important. Read before installation.
 This is not an engineered drawing. It is intended for representational purposes only. The dimensions called out on this drawing are intended to be used as a guide only, and are not intended to be suitable for all conditions. Adding signs or other components around the scoreboard beyond the scope of this drawing or increasing the display height from the ground will affect the installation requirements. Nevco recommends that you consult a professional engineer or architect familiar with the area before attempting installation. They can verify that the selected mounting beams or posts along with the brackets, screws, and other hardware items provided by others or Nevco are adequate for your local soil conditions, wind loads and other local codes. If procedures are used that are not covered in this drawing, careful analysis of the installation is urged.

Outdoor Scoreboard Pier Installation 2/3 Column With Laterals		 Nevco, Inc. Greenville, Illinois 62246	
Drawing No.		241-0407	
Drawn	KAB	Date	12/14/2018
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105 MPH WIND ZONES

Rev A

EXPOSURE C (See Note 3)

Column and Foundation Requirements (Based on ASCE 7-10)

Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W8x21	2' (3')	9' (8')	26' (25')
10'	W10x22	2' (3')	10' (86")	29' (276")
12'	W10x26	2' (3')	11' (96")	32' (306")
14'	W12x26	2' (3')	116" (10')	346" (33')
16'	W12x30	2' (3')	126" (106")	376" (356")
18'	W14x34	2' (3')	136" (116")	406" (386")
20'	W16x36	2' (3')	15' (12')	44' (41')
22'	W16x40	2' (3')	166" (13')	476" (44')
25'	W16x50	3' (4')	146" (12')	486" (46')
30'	W18x55	3' (4')	17' (14')	56' (53')
35'	W21x62	3' (4')	19' (16')	63' (60')
40'	W24x68	3' (4')	216" (18')	706" (67')

20 FEET WIDE INSTALLATIONS (2 COLUMNS)

EXPOSURE B (See Note 4)

Column and Foundation Requirements (Based on ASCE 7-10)

Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W8x18	2' (3')	8' (7')	25' (24')
10'	W8x18	2' (3')	9' (76")	28' (266")
12'	W10x22	2' (3')	96" (8')	306" (29')
14'	W14x22	2' (3')	10' (9')	33' (32')
16'	W10x26	2' (3')	11' (96")	36' (346")
18'	W12x26	2' (3')	116" (10')	386" (37')
20'	W12x30	2' (3')	12' (106")	41' (396")
22'	W14x34	2' (3')	136" (11')	446" (42')
25'	W16x36	3' (4')	12' (106")	46' (446")
30'	W21x44	3' (4')	136" (12')	526" (51')
35'	W18x55	3' (4')	156" (13')	596" (57')
40'	W21x62	3' (4')	176" (15')	666" (64')

120 MPH WIND ZONES

Column and Foundation Requirements (Based on ASCE 7-10)

Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W10x22	2' (3')	10' (9')	27' (26')
10'	W10x26	2' (3')	11' (96")	30' (286")
12'	W12x30	2' (3')	12' (106")	33' (316")
14'	W14x34	2' (3')	136" (11')	366" (34')
16'	W18x35	2' (3')	15' (12')	40' (37')
18'	W16x40	2' (3')	16' (126")	43' (396")
20'	W14x43	2' (3')	176" (136")	466" (426")
22'	W16x50	2' (3')	196" (156")	506" (466")
25'	W18x55	3' (4')	17' (14')	51' (48')
30'	W21x62	3' (4')	20' (166")	59' (556")
35'	W24x76	3' (4')	226" (19')	666" (63')
40'	W24x84	3' (4')	256" (216")	746" (706")

20 FEET WIDE INSTALLATIONS (2 COLUMNS)

Column and Foundation Requirements (Based on ASCE 7-10)

Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W8x18	2' (3')	9' (76")	26' (246")
10'	W10x22	2' (3')	96" (86")	286" (276")
12'	W10x26	2' (3')	106" (9')	316" (30')
14'	W12x26	2' (3')	116" (96")	346" (326")
16'	W12x30	2' (3')	12' (106")	37' (356")
18'	W14x30	2' (3')	13' (11')	40' (38')
20'	W14x34	2' (3')	14' (116")	43' (406")
22'	W16x40	2' (3')	156" (126")	466" (436")
25'	W21x44	3' (4')	136" (12')	476" (46')
30'	W18x55	3' (4')	16' (136")	55' (526")
35'	W21x62	3' (4')	186" (156")	626" (596")
40'	W24x68	3' (4')	206" (176")	696" (666")

130 MPH WIND ZONES

Column and Foundation Requirements (Based on ASCE 7-10)

Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W10x26	2' (3')	11' (96")	28' (266")
10'	W12x26	2' (3')	12' (10')	31' (29')
12'	W14x30	2' (3')	136" (11')	346" (32')
14'	W14x34	2' (3')	15' (12')	38' (35')
16'	W16x40	2' (3')	166" (126")	416" (376")
18'	W21x44	2' (3')	18' (14')	45' (41')
20'	W16x50	2' (3')	196" (15')	486" (44')
22'	W18x55	2' (3')	22' (17')	53' (48')
25'	W21x62	3' (4')	186" (156")	526" (496")
30'	W24x68	3' (4')	22' (186")	61' (576")
35'	W24x84	3' (4')	25' (21')	69' (65')
40'	W21x101	3' (4')	28' (236")	77' (726")

20 FEET WIDE INSTALLATIONS (2 COLUMNS)

Column and Foundation Requirements (Based on ASCE 7-10)

Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W8x21	2' (3')	96" (8')	266" (25')
10'	W10x22	2' (3')	10' (9')	29' (28')
12'	W12x26	2' (3')	11' (96")	32' (306")
14'	W12x30	2' (3')	12' (106")	35' (336")
16'	W14x30	2' (3')	13' (11')	38' (36')
18'	W14x34	2' (3')	14' (116")	41' (386")
20'	W16x36	2' (3')	156" (12')	446" (41')
22'	W14x43	2' (3')	176" (136")	486" (446")
25'	W16x50	3' (4')	15' (126")	49' (466")
30'	W21x55	3' (4')	176" (15')	566" (54')
35'	W21x68	3' (4')	20' (17')	64' (61')
40'	W24x76	3' (4')	23' (19')	72' (68')

Chart Notes:

1. If the display height is between chart values shown above, use the next highest value.
2. * It is required that 4x3x3/16 steel tubing be welded to back of columns 10' from the ground and every 10' to the top of the column for bracing. (See detail on 241-0415).
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
2/3 Column With
Laterals



Nevco, Inc.
Greenville, Illinois 62246

Drawing No. 241-0407

Drawn KAB Date 12/14/2018

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150 MPH WIND ZONES

Rev A

EXPOSURE C (See Note 3)

Column and Foundation Requirements (Based on ASCE 7-10)

Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W12x26	2' (3')	12' (10'6")	29' (27'6")
10'	W14x30	2' (3')	14' (11'6")	33' (30'6")
12'	W16x36	2' (3')	16' (12'6")	37' (33'6")
14'	W16x40	2' (3')	18' (14')	41' (37')
16'	W16x50	2' (3')	19'6" (15')	44'6" (40')
18'	W18x50	2' (3')	21'6" (16'6")	48'6" (43'6")
20'	W21x55	2' (3')	23'6" (18')	52'6" (47')
22'	W21x62	2' (3')	26'6" (20')	57'6" (51')
25'	W24x68	3' (4')	22'6" (18'6")	56'6" (52'6")
30'	W24x84	3' (4')	26'6" (22')	65'6" (61')
35'	W24x103	3' (4')	30' (25')	74' (69')
40'	W24x117	3' (4')	34' (28')	83' (77')

20 FEET WIDE INSTALLATIONS (2 COLUMNS)

EXPOSURE B (See Note 4)

Column and Foundation Requirements (Based on ASCE 7-10)

Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W10x22	2' (3')	10'6" (9')	27'6" (26')
10'	W12x26	2' (3')	11'6" (10')	30'6" (29')
12'	W12x30	2' (3')	12'6" (10'6")	33'6" (31'6")
14'	W14x34	2' (3')	14' (11'6")	37' (34'6")
16'	W16x36	2' (3')	15'6" (12')	40'6" (37')
18'	W16x40	2' (3')	17' (13')	44' (40')
20'	W21x44	2' (3')	18'6" (14'6")	47'6" (43'6")
22'	W18x50	2' (3')	21' (16')	52' (47')
25'	W21x55	3' (4')	18' (15')	52' (49')
30'	W21x68	3' (4')	21' (17'6")	60' (56'6")
35'	W24x84	3' (4')	24' (20')	68' (64')
40'	W24x94	3' (4')	27'6" (23')	76'6" (72')

180 MPH WIND ZONES

Column and Foundation Requirements (Based on ASCE 7-10)

Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W14x34	2' (3')	15' (12')	32' (29')
10'	W16x40	2' (3')	17'6" (13'6")	36'6" (32'6")
12'	W14x48	2' (3')	20'6" (15'6")	41'6" (36'6")
14'	W18x55	2' (3')	23' (17'6")	46' (40'6")
16'	W21x55	2' (3')	25' (19')	50' (44')
18'	W21x62	2' (3')	27'6" (21')	54'6" (48')
20'	W24x68	2' (3')	30' (23')	59' (52')
22'	W24x76	2' (3')	34' (25'6")	65' (56'6")
25'	W24x94	3' (4')	28'6" (23'6")	62'6" (57'6")
30'	W24x104	3' (4')	33'6" (27'6")	72'6" (66'6")
35'	W24x131	3' (4')	38'6" (32')	82'6" (76')
40'	W24x162	3' (4')	43'6" (36')	92'6" (85')

20 FEET WIDE INSTALLATIONS (2 COLUMNS)

Column and Foundation Requirements (Based on ASCE 7-10)

Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W12x26	2' (3')	12' (10')	29' (27')
10'	W14x30	2' (3')	13'6" (11')	32'6" (30')
12'	W16x36	2' (3')	16' (12'6")	37' (33'6")
14'	W16x40	2' (3')	17'6" (13'6")	40'6" (36'6")
16'	W14x48	2' (3')	19'6" (15')	44'6" (40')
18'	W18x50	2' (3')	21'6" (16'6")	48'6" (43'6")
20'	W21x55	2' (3')	23'6" (18')	52'6" (47')
22'	W21x62	2' (3')	26'6" (20'6")	57'6" (51'6")
25'	W24x68	3' (4')	22'6" (19')	56'6" (53')
30'	W24x84	3' (4')	26'6" (22')	65'6" (61')
35'	W24x104	3' (4')	30'6" (25'6")	74'6" (69'6")
40'	W24x131	3' (4')	34'6" (29')	83'6" (78')

Outdoor Scoreboard
Pier Installation
2/3 Column With
Laterals



Nevco, Inc.
Greenville, Illinois 62246

Drawing No. 241-0407

Drawn KAB Date 12/14/2018

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105 MPH WIND ZONES

Rev A

EXPOSURE C (See Note 3)

EXPOSURE B (See Note 4)

Column and Foundation Requirements (Based on ASCE 7-10)

Column and Foundation Requirements (Based on ASCE 7-10)

Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W10x22	2' (3)	10' (8'6")	27' (25'6")
10'	W10x26	2' (3)	11' (9'6")	30' (28'6")
12'	W12x26	2' (3)	11'6" (10')	32'6" (31')
14'	W12x30	2' (3)	13' (11')	36' (34')
16'	W14x34	2' (3)	14' (11'6")	39' (36'6")
18'	W16x36	2' (3)	15'6" (12')	42'6" (39')
20'	W16x40	2' (3)	16'6" (13')	45'6" (42')
22'	W21x44	2' (3)	18' (14')	49' (45')
25'	W18x55	3' (4)	16' (13'6")	50' (47'6")
30'	W21x62	3' (4)	19' (16')	58' (55')
35'	W24x68	3' (4)	21'6" (18')	65'6" (62')
40'	W24x84	3' (4)	24' (20')	73' (69')

Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W8x18	2' (3)	8'6" (7'6")	25'6" (24'6")
10'	W8x21	2' (3)	9'6" (8')	28'6" (27')
12'	W10x22	2' (3)	10' (8'6")	31' (29'6")
14'	W10x26	2' (3)	11' (9'6")	34' (32'6")
16'	W12x26	2' (3)	11'6" (10')	36'6" (35')
18'	W12x30	2' (3)	12'6" (10'6")	39'6" (37'6")
20'	W14x34	2' (3)	13'6" (11')	42'6" (40')
22'	W18x35	2' (3)	14'6" (11'6")	45'6" (42'6")
25'	W16x40	3' (4)	13' (11'6")	47' (45'6")
30'	W18x50	3' (4)	15' (13')	54' (52')
35'	W21x55	3' (4)	17'6" (14'6")	61'6" (58'6")
40'	W21x68	3' (4)	19'6" (16'6")	68'6" (65'6")

24 FEET WIDE INSTALLATIONS (2 COLUMNS)

28 FEET WIDE INSTALLATIONS (2 COLUMNS)

32 FEET WIDE INSTALLATIONS (3 COLUMNS)

36 FEET WIDE INSTALLATIONS (3 COLUMNS)

Column and Foundation Requirements (Based on ASCE 7-10)

Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W10x22	2' (3)	10'6" (9')	27'6" (26')
10'	W12x26	2' (3)	11'6" (10')	30'6" (29')
12'	W12x30	2' (3)	12'6" (10'6")	33'6" (31'6")
14'	W14x34	2' (3)	14' (11'6")	37' (34'6")
16'	W16x36	2' (3)	15'6" (12')	40'6" (37')
18'	W16x40	2' (3)	17' (13')	44' (40')
20'	W21x44	2' (3)	18'6" (14'6")	47'6" (43'6")
22'	W16x50	2' (3)	20' (15'6")	51' (46'6")
25'	W18x55	3' (4)	17' (14'6")	51' (48'6")
30'	W21x68	3' (4)	20'6" (17'6")	59'6" (56'6")
35'	W24x76	3' (4)	23'6" (20')	67'6" (64')
40'	W24x94	3' (4)	26'6" (22'6")	75'6" (71'6")

Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W8x21	2' (3)	9' (7'6")	26' (24'6")
10'	W10x22	2' (3)	10' (8'6")	29' (27'6")
12'	W10x26	2' (3)	10'6" (9')	31'6" (30')
14'	W12x26	2' (3)	11'6" (10')	34'6" (33')
16'	W12x30	2' (3)	12'6" (10'6")	37'6" (35'6")
18'	W14x34	2' (3)	13'6" (11')	40'6" (38')
20'	W18x35	2' (3)	14'6" (12')	43'6" (41')
22'	W16x40	2' (3)	16' (12'6")	47' (43'6")
25'	W21x44	3' (4)	14' (12')	48' (46')
30'	W18x55	3' (4)	16'6" (14')	55'6" (53')
35'	W21x62	3' (4)	19' (16')	63' (60')
40'	W24x68	3' (4)	21'6" (18')	70'6" (67')

Column and Foundation Requirements (Based on ASCE 7-10)

Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W8x21	2' (3)	9' (8')	26' (25')
10'	W10x22	2' (3)	10' (8'6")	29' (27'6")
12'	W10x26	2' (3)	11' (9'6")	32' (30'6")
14'	W12x26	2' (3)	11'6" (10')	34'6" (33')
16'	W12x30	2' (3)	12'6" (10'6")	37'6" (35'6")
18'	W14x34	2' (3)	13'6" (11'6")	40'6" (38'6")
20'	W16x36	2' (3)	15' (12')	44' (41')
22'	W16x40	3' (4)	12'6" (11')	43'6" (42')
25'	W21x44	3' (4)	14' (12')	48' (46')
30'	W18x55	3' (4)	16' (13'6")	55' (52'6")
35'	W21x62	3' (4)	19' (16')	63' (60')
40'	W24x68	3' (4)	21'6" (18')	70'6" (67')

Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W10x17	2' (3)	8' (7')	25' (24')
10'	W8x18	2' (3)	8'6" (7'6")	27'6" (26'6")
12'	W8x21	2' (3)	9'6" (8')	30'6" (29')
14'	W10x22	2' (3)	10' (8'6")	33' (31'6")
16'	W10x26	2' (3)	10'6" (9'6")	35'6" (34'6")
18'	W12x26	2' (3)	11'6" (10')	38'6" (37')
20'	W12x30	2' (3)	12' (10'6")	41' (39'6")
22'	W14x34	3' (4)	11' (10')	42' (41')
25'	W18x35	3' (4)	11'6" (10'6")	45'6" (44'6")
30'	W21x44	3' (4)	13' (11'6")	52' (50'6")
35'	W18x55	3' (4)	15'6" (13')	59'6" (57')
40'	W21x62	3' (4)	17'6" (15')	66'6" (64')

Column and Foundation Requirements (Based on ASCE 7-10)

Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
9'	W10x22	2' (3)	10' (9')	28' (27')
10'	W10x26	2' (3)	10'6" (9')	29'6" (28')
11'	W10x26	2' (3)	11' (9'6")	31' (29'6")
12'	W12x26	2' (3)	11'6" (10')	32'6" (31')
13'	W12x30	2' (3)	12' (10'6")	34' (32'6")
14'	W12x30	2' (3)	12'6" (10'6")	35'6" (33'6")
15'	W14x30	2' (3)	13' (11')	37' (35')
20'	W16x40	3' (4)	13' (11'6")	42' (40'6")
25'	W18x50	3' (4)	15'6" (13')	49'6" (47')
30'	W21x55	3' (4)	18' (15')	57' (54')
35'	W21x68	3' (4)	20'6" (17')	64'6" (61')
40'	W24x84	3' (4)	24' (20')	73' (69')

Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
9'	W8x21	2' (3)	9' (7'6")	27' (25'6")
10'	W8x21	2' (3)	9' (8')	28' (27')
11'	W10x22	2' (3)	9'6" (8'6")	29'6" (28'6")
12'	W10x22	2' (3)	10' (8'6")	31' (29'6")
13'	W14x22	2' (3)	10'6" (9')	32'6" (31')
14'	W10x26	2' (3)	10'6" (9'6")	33'6" (32'6")
15'	W12x26	2' (3)	11' (9'6")	35' (33'6")
20'	W14x34	3' (4)	11' (10')	40' (39')
25'	W16x40	3' (4)	12'6" (11')	46'6" (45')
30'	W16x50	3' (4)	14'6" (12'6")	53'6" (51'6")
35'	W21x55	3' (4)	16'6" (14')	60'6" (58')
40'	W21x68	3' (4)	19'6" (16'6")	68'6" (65'6")

Chart Notes:

1. If the display height is between chart values shown above, use the next highest value.
2. * It is required that 4x3x3/16 steel tubing be welded to back of columns 10' from the ground and every 10' to the top of the column for bracing. (See detail on 241-0415).
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
2/3 Column With
Laterals



Nevco, Inc.
Greenville, Illinois 62246

Drawing No. 241-0407

Drawn KAB Date 12/14/2018

Sheet of 5 9

120 MPH WIND ZONES

EXPOSURE C (See Note 3)

EXPOSURE B (See Note 4)

Rev **A**

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W10x26	2' (3')	11' (9'6")	28' (26'6")
10'	W12x26	2' (3')	12' (10')	31' (29')
12'	W14x30	2' (3')	13'6" (11')	34'6" (32')
14'	W18x35	3' (4')	12' (10'6")	35' (33'6")
16'	W16x40	3' (4')	13' (11'6")	38' (36'6")
18'	W21x44	3' (4')	14' (12')	41' (39')
20'	W16x50	3' (4')	15'6" (13')	44'6" (42')
22'	W18x55	3' (4')	16'6" (14')	47'6" (45')
25'	W21x62	3' (4')	19' (16')	53' (50')
30'	W24x68	3' (4')	22' (18'6")	61' (57'6")
35'	W24x84	3' (4')	25'6" (21')	69'6" (65')
40'	W21x101	3' (4')	28'6" (24')	77'6" (73')

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W12x26	2' (3')	11'6" (10')	28'6" (27')
10'	W12x30	2' (3')	13' (11')	32' (30')
12'	W14x34	2' (3')	14'6" (11'6")	35'6" (32'6")
14'	W16x40	3' (4')	12'6" (11')	35'6" (34')
16'	W21x44	3' (4')	14' (12')	39' (37')
18'	W16x50	3' (4')	15'6" (13')	42'6" (40')
20'	W18x55	3' (4')	17' (14')	46' (43')
22'	W21x55	3' (4')	18' (15')	49' (46')
25'	W21x62	3' (4')	20' (17')	54' (51')
30'	W24x76	3' (4')	24'6" (20'6")	63'6" (59'6")
35'	W24x94	3' (4')	28' (23'6")	72' (67'6")
40'	W24x104	3' (4')	31'6" (26'6")	80'6" (75'6")

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W10x22	2' (3')	10' (8'6")	27' (25'6")
10'	W10x26	2' (3')	11' (9'6")	30' (28'6")
12'	W10x30	2' (3')	12' (10'6")	33' (31'6")
14'	W14x30	3' (4')	11' (10')	34' (33')
16'	W14x34	3' (4')	11'6" (10'6")	36'6" (35'6")
18'	W16x40	3' (4')	12'6" (11')	39'6" (38')
20'	W14x43	3' (4')	13'6" (12')	42'6" (41')
22'	W16x50	3' (4')	14'6" (12'6")	45'6" (43'6")
25'	W18x55	3' (4')	16'6" (13'6")	50'6" (47'6")
30'	W21x62	3' (4')	19' (16')	58' (55')
35'	W24x76	3' (4')	22'6" (19')	66'6" (63')
40'	W24x84	3' (4')	25'6" (21')	74'6" (70')

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
9'	W10x26	2' (3')	11'6" (9'6")	29'6" (27'6")
10'	W12x26	2' (3')	12' (10')	31' (29')
11'	W12x30	2' (3')	12'6" (10'6")	32'6" (30'6")
12'	W14x30	3' (4')	11' (10')	32' (31')
13'	W14x34	3' (4')	11'6" (10')	33'6" (32')
14'	W14x34	3' (4')	11'6" (10'6")	34'6" (33'6")
15'	W16x36	3' (4')	12' (11')	36' (35')
20'	W16x50	3' (4')	15' (13')	44' (42')
25'	W21x55	3' (4')	18' (15')	52' (49')
30'	W21x68	3' (4')	21' (17'6")	60' (56'6")
35'	W24x76	3' (4')	24' (20')	68' (64')
40'	W21x101	3' (4')	28'6" (23'6")	77'6" (72'6")

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W8x21	2' (3')	9'6" (8')	26'6" (25')
10'	W10x22	2' (3')	10'6" (9')	29'6" (28')
12'	W12x26	2' (3')	11' (9'6")	32' (30'6")
14'	W12x30	3' (4')	10'6" (9'6")	33'6" (32'6")
16'	W14x30	3' (4')	11' (10')	36' (35')
18'	W14x34	3' (4')	11'6" (10'6")	38'6" (37'6")
20'	W16x40	3' (4')	12' (11')	41' (40')
22'	W14x43	3' (4')	13' (11'6")	44' (42'6")
25'	W18x50	3' (4')	15'6" (13')	49'6" (47')
30'	W21x55	3' (4')	18' (15')	57' (54')
35'	W21x68	3' (4')	20'6" (17')	64'6" (61')
40'	W24x76	3' (4')	23' (19'6")	72' (68'6")

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W10x22	2' (3')	10' (8'6")	27' (25'6")
10'	W10x26	2' (3')	11' (9'6")	30' (28'6")
12'	W12x26	2' (3')	12' (10')	33' (31')
14'	W14x30	3' (4')	11' (10')	34' (33')
16'	W14x34	3' (4')	11'6" (10'6")	36'6" (35'6")
18'	W16x40	3' (4')	12'6" (11')	39'6" (38')
20'	W14x43	3' (4')	13'6" (11'6")	42'6" (40'6")
22'	W14x48	3' (4')	14'6" (12')	45'6" (43')
25'	W18x55	3' (4')	16' (13'6")	50' (47'6")
30'	W21x62	3' (4')	19'6" (16'6")	58'6" (55'6")
35'	W24x76	3' (4')	22'6" (19')	66'6" (63')
40'	W24x94	3' (4')	25'6" (21'6")	74'6" (70'6")

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W8x18	2' (3')	9' (7'6")	26' (24'6")
10'	W10x22	2' (3')	9'6" (8'6")	28'6" (27'6")
12'	W14x22	2' (3')	10'6" (9')	31'6" (30')
14'	W12x26	3' (4')	9'6" (8'6")	32'6" (31'6")
16'	W12x30	3' (4')	10' (9')	35' (34')
18'	W14x30	3' (4')	11' (10')	38' (37')
20'	W14x34	3' (4')	11'6" (10'6")	40'6" (39'6")
22'	W16x36	3' (4')	12' (11')	43' (42')
25'	W14x43	3' (4')	13' (11'6")	47' (45'6")
30'	W18x50	3' (4')	15'6" (13')	54'6" (52')
35'	W21x62	3' (4')	18'6" (15'6")	62'6" (59'6")
40'	W24x68	3' (4')	20'6" (17'6")	69'6" (66'6")

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
9'	W10x22	2' (3')	10' (8'6")	28' (26'6")
10'	W10x22	2' (3')	10' (9')	29' (28')
11'	W10x26	2' (3')	10'6" (9')	30'6" (29')
12'	W10x26	3' (4')	9'6" (8'6")	30'6" (29'6")
13'	W12x26	3' (4')	10' (9')	32' (31')
14'	W12x26	3' (4')	10' (9')	33' (32')
15'	W12x30	3' (4')	10'6" (9'6")	34'6" (33'6")
20'	W16x36	3' (4')	12' (11')	41' (40')
25'	W16x50	3' (4')	14'6" (12'6")	48'6" (46'6")
30'	W21x55	3' (4')	17' (14'6")	56' (53'6")
35'	W21x68	3' (4')	19'6" (16'6")	63'6" (60'6")
40'	W24x76	3' (4')	23' (19'6")	72' (68'6")

24 FEET WIDE INSTALLATIONS (2 COLUMNS)

28 FEET WIDE INSTALLATIONS (2 COLUMNS)

32 FEET WIDE INSTALLATIONS (3 COLUMNS)

36 FEET WIDE INSTALLATIONS (3 COLUMNS)

Chart Notes:

1. If the display height is between chart values shown above, use the next highest value.
2. * It is required that 4x3x3/16 steel tubing be welded to back of columns 10' from the ground and every 10' to the top of the column for bracing. (See detail on sheet 7)
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
2/3 Column With
Laterals



Nevco, Inc.
Greenville, Illinois 62246

Drawing No. 241-0407

Drawn **KAB** Date **12/14/2018**

Sheet of **6** **9**

130 MPH WIND ZONES

EXPOSURE C (See Note 3)

EXPOSURE B (See Note 4)

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W12x26	2'(3')	116"(10')	286"(27')
10'	W12x30	2'(3')	13'(11')	32'(30')
12'	W14x34	2'(3')	146"(116")	356"(326")
14'	W16x40	3'(4')	13'(116")	36'(346")
16'	W21x44	3'(4')	146"(12')	396"(37')
18'	W16x50	3'(4')	156"(13')	426"(40')
20'	W18x55	3'(4')	17'(14')	46'(43')
22'	W21x55	3'(4')	18'(15')	49'(46')
25'	W21x68	3'(4')	21'(176")	55'(516")
30'	W24x76	3'(4')	246"(206")	636"(596")
35'	W24x94	3'(4')	28'(236")	72'(676")
40'	W24x104	3'(4')	32'(266")	81'(756")

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W12x26	2'(3')	12'(106")	29'(276")
10'	W14x34	2'(3')	14'(116")	33'(306")
12'	W16x36	2'(3')	16'(126")	37'(336")
14'	W14x43	3'(4')	14'(12')	37'(35')
16'	W16x50	3'(4')	156"(13')	406"(38')
18'	W18x55	3'(4')	17'(146")	44'(416")
20'	W21x55	3'(4')	186"(156")	476"(446")
22'	W21x62	3'(4')	20'(17)	51'(48')
25'	W24x64	3'(4')	226"(186")	566"(526")
30'	W24x94	3'(4')	276"(226")	666"(616")
35'	W24x104	3'(4')	316"(26')	756"(70')
40'	W24x131	3'(4')	356"(29')	846"(78')

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W10x26	2'(3')	11'(96")	28'(266")
10'	W12x26	2'(3')	12'(10')	31'(29')
12'	W12x30	2'(3')	13'(11')	34'(32')
14'	W14x34	3'(4')	116"(106")	346"(336")
16'	W16x40	3'(4')	126"(11')	376"(36')
18'	W21x44	3'(4')	14'(12')	41'(39')
20'	W16x50	3'(4')	15'(126")	44'(416")
22'	W18x50	3'(4')	16'(136")	47'(446")
25'	W21x55	3'(4')	18'(15')	52'(49')
30'	W21x68	3'(4')	21'(176")	60'(566")
35'	W24x84	3'(4')	25'(21')	69'(65')
40'	W21x101	3'(4')	28'(236")	77'(726")

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
9'	W12x26	2'(3')	12'(106")	30'(286")
10'	W12x30	2'(3')	126"(106")	316"(296")
11'	W14x30	2'(3')	136"(11')	336"(31')
12'	W14x34	3'(4')	116"(106")	326"(316")
13'	W18x35	3'(4')	12'(11')	34'(33')
14'	W16x36	3'(4')	126"(11')	356"(34')
15'	W16x40	3'(4')	13'(116")	37'(356")
20'	W18x55	3'(4')	17'(14')	46'(43')
25'	W21x62	3'(4')	20'(17)	54'(51')
30'	W24x76	3'(4')	236"(196")	626"(586")
35'	W24x94	3'(4')	266"(22')	706"(66')
40'	W24x104	3'(4')	316"(26')	806"(75')

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W10x22	2'(3')	10'(86")	27'(256")
10'	W10x26	2'(3')	11'(96")	30'(286")
12'	W12x26	2'(3')	12'(10')	33'(31')
14'	W14x30	3'(4')	11'(10')	34'(33')
16'	W14x34	3'(4')	116"(106")	366"(356")
18'	W16x40	3'(4')	126"(11')	396"(38')
20'	W14x43	3'(4')	136"(116")	426"(406")
22'	W14x48	3'(4')	146"(126")	456"(436")
25'	W18x55	3'(4')	17'(14')	51'(48')
30'	W21x62	3'(4')	196"(166")	586"(556")
35'	W24x76	3'(4')	226"(19')	666"(63')
40'	W24x94	3'(4')	256"(216")	746"(706")

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W14x22	2'(3')	106"(9')	276"(26')
10'	W12x26	2'(3')	116"(10')	306"(29')
12'	W12x30	2'(3')	126"(11')	336"(32')
14'	W14x34	3'(4')	116"(106")	346"(336")
16'	W16x36	3'(4')	126"(11')	376"(36')
18'	W14x43	3'(4')	136"(12')	406"(39')
20'	W16x50	3'(4')	15'(126")	44'(416")
22'	W18x50	3'(4')	16'(136")	47'(446")
25'	W21x55	3'(4')	18'(15')	52'(49')
30'	W24x68	3'(4')	22'(18')	61'(57')
35'	W24x84	3'(4')	25'(21')	69'(65')
40'	W21x101	3'(4')	286"(236")	776"(726")

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W8x21	2'(3')	96"(8')	266"(25')
10'	W10x22	2'(3')	10'(9')	29'(28')
12'	W10x26	2'(3')	11'(96")	32'(306")
14'	W12x26	3'(4')	10'(9')	33'(32')
16'	W14x30	3'(4')	11'(96")	36'(346")
18'	W14x34	3'(4')	116"(106")	386"(376")
20'	W16x36	3'(4')	12'(11')	41'(40')
22'	W16x40	3'(4')	13'(116")	44'(426")
25'	W16x50	3'(4')	146"(12')	486"(46')
30'	W21x55	3'(4')	17'(14')	56'(53')
35'	W21x68	3'(4')	20'(17')	64'(61')
40'	W24x76	3'(4')	23'(19')	72'(68')

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
9'	W10x22	2'(3')	106"(9')	286"(27')
10'	W10x26	2'(3')	11'(96")	30'(286")
11'	W12x26	2'(3')	116"(96")	316"(296")
12'	W12x26	3'(4')	10'(9')	31'(30')
13'	W12x30	3'(4')	106"(96")	326"(316")
14'	W12x30	3'(4')	11'(96")	34'(326")
15'	W14x34	3'(4')	11'(10')	35'(34')
20'	W14x43	3'(4')	136"(116")	426"(406")
25'	W18x55	3'(4')	16'(136")	50'(476")
30'	W21x62	3'(4')	19'(16')	58'(55')
35'	W24x68	3'(4')	216"(18')	656"(62')
40'	W24x94	3'(4')	256"(216")	746"(706")

24 FEET WIDE INSTALLATIONS (2 COLUMNS)

28 FEET WIDE INSTALLATIONS (2 COLUMNS)

32 FEET WIDE INSTALLATIONS (3 COLUMNS)

36 FEET WIDE INSTALLATIONS (3 COLUMNS)

Chart Notes:

- If the display height is between chart values shown above, use the next highest value.
- * It is required that 4x3x3/16 steel tubing be welded to back of columns 10' from the ground and every 10' to the top of the column for bracing. (See detail on 241-0415).
- 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.
- 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
2/3 Column With
Laterals



Nevco, Inc.
Greenville, Illinois 62246

Drawing No. 241-0407

Drawn KAB Date 12/14/2018

Sheet 7 of 9

150 MPH WIND ZONES

EXPOSURE C (See Note 3)

EXPOSURE B (See Note 4)

Rev A

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W12x30	2' (3')	136" (11')	306" (28')
10'	W18x35	2' (3')	156" (12')	346" (31')
12'	W16x40	2' (3')	176" (136")	386" (34'6")
14'	W16x50	2' (3')	20' (15'6")	43' (38'6")
16'	W18x55	2' (3')	226" (17')	476" (42')
18'	W21x55	2' (3')	246" (18'6")	516" (45'6")
20'	W21x62	2' (3')	266" (20'6")	556" (49'6")
22'	W21x68	3' (4')	22' (18')	53' (49')
25'	W24x76	3' (4')	256" (21')	596" (55')
30'	W21x101	3' (4')	296" (24'6")	686" (63'6")
35'	W24x117	3' (4')	34' (28')	78' (72')
40'	W24x146	3' (4')	386" (32')	876" (81')

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W14x34	2' (3')	146" (11'6")	316" (28'6")
10'	W16x40	2' (3')	17' (13')	36' (32')
12'	W21x44	2' (3')	196" (15')	406" (36')
14'	W18x50	2' (3')	22' (17')	45' (40')
16'	W21x55	2' (3')	25' (19')	50' (44')
18'	W21x62	2' (3')	27' (20'6")	54' (47'6")
20'	W21x68	2' (3')	296" (22'6")	586" (51'6")
22'	W18x76	3' (4')	246" (20')	556" (51')
25'	W24x84	3' (4')	27' (22'6")	61' (56'6")
30'	W24x104	3' (4')	33' (27')	72' (66')
35'	W24x131	3' (4')	38' (31'6")	82' (75'6")
40'	W24x162	3' (4')	43' (35'6")	92' (84'6")

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W12x26	2' (3')	12' (10'6")	29' (27'6")
10'	W14x30	2' (3')	136" (11')	326" (30')
12'	W18x35	2' (3')	156" (12')	366" (33')
14'	W16x40	2' (3')	176" (136")	406" (36'6")
16'	W21x44	3' (4')	15' (12'6")	40' (37'6")
18'	W18x50	3' (4')	166" (14')	436" (41')
20'	W21x55	3' (4')	18' (15')	47' (44')
22'	W21x62	3' (4')	196" (16')	506" (47')
25'	W21x68	3' (4')	216" (18')	556" (52')
30'	W24x84	3' (4')	25' (21')	64' (60')
35'	W21x101	3' (4')	30' (25')	74' (69')
40'	W24x117	3' (4')	34' (28')	83' (77')

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
9'	W14x34	2' (3')	14' (11'6")	32' (29'6")
10'	W14x34	2' (3')	15' (12')	34' (31')
11'	W16x36	2' (3')	166" (12'6")	366" (32'6")
12'	W16x40	2' (3')	176" (136")	386" (34'6")
13'	W14x43	3' (4')	14' (12')	36' (34')
14'	W21x44	3' (4')	15' (12'6")	38' (35'6")
15'	W16x50	3' (4')	16' (13')	40' (37')
20'	W21x62	3' (4')	20' (17')	49' (46')
25'	W24x76	3' (4')	24' (20')	58' (54')
30'	W24x94	3' (4')	28' (23'6")	67' (62'6")
35'	W24x104	3' (4')	326" (26'6")	766" (70'6")
40'	W24x146	3' (4')	38' (31'6")	87' (80'6")

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W10x26	2' (3')	11' (9'6")	28' (26'6")
10'	W12x30	2' (3')	12' (10'6")	31' (29'6")
12'	W14x34	2' (3')	14' (11'6")	35' (32'6")
14'	W16x36	2' (3')	16' (12')	39' (35')
16'	W16x40	2' (3')	176" (136")	426" (38'6")
18'	W14x48	2' (3')	19' (15')	46' (42')
20'	W18x50	2' (3')	21' (16')	50' (45')
22'	W18x55	3' (4')	176" (146")	486" (45'6")
25'	W21x62	3' (4')	20' (17')	54' (51')
30'	W24x76	3' (4')	236" (19'6")	626" (58'6")
35'	W24x94	3' (4')	276" (22'6")	716" (66'6")
40'	W24x104	3' (4')	31' (25'6")	80' (74'6")

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W12x26	2' (3')	116" (10')	286" (27')
10'	W14x30	2' (3')	136" (11')	326" (30')
12'	W18x35	2' (3')	15' (12')	36' (33')
14'	W16x40	2' (3')	17' (13')	40' (36')
16'	W21x44	2' (3')	196" (15')	446" (40')
18'	W18x50	2' (3')	21' (16'6")	48' (43'6")
20'	W18x55	2' (3')	23' (17'6")	52' (46'6")
22'	W21x62	3' (4')	19' (16')	50' (47')
25'	W21x68	3' (4')	216" (18')	556" (52')
30'	W24x84	3' (4')	26' (22')	65' (61')
35'	W24x103	3' (4')	30' (25')	74' (69')
40'	W24x117	3' (4')	34' (28'6")	83' (77'6")

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W10x22	2' (3')	106" (9')	276" (26')
10'	W12x26	2' (3')	116" (9'6")	306" (28'6")
12'	W12x30	2' (3')	126" (10'6")	336" (31'6")
14'	W14x34	2' (3')	14' (11'6")	37' (34'6")
16'	W16x36	3' (4')	12' (11')	37' (36')
18'	W16x40	3' (4')	13' (11'6")	40' (38'6")
20'	W21x44	3' (4')	146" (12')	436" (41')
22'	W18x50	3' (4')	156" (13')	466" (44')
25'	W21x55	3' (4')	176" (14'6")	516" (48'6")
30'	W21x68	3' (4')	20' (17')	59' (56')
35'	W24x84	3' (4')	24' (20')	68' (64')
40'	W24x94	3' (4')	276" (23')	766" (72')

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
9'	W12x26	2' (3')	116" (10')	296" (28')
10'	W12x26	2' (3')	12' (10'6")	31' (29'6")
11'	W12x30	2' (3')	13' (11')	33' (31')
12'	W14x30	2' (3')	136" (11')	346" (32')
13'	W14x34	3' (4')	116" (10'6")	336" (32'6")
14'	W18x35	3' (4')	12' (11')	35' (34')
15'	W16x36	3' (4')	126" (11')	366" (35')
20'	W18x50	3' (4')	16' (13'6")	45' (42'6")
25'	W21x62	3' (4')	196" (16')	536" (50')
30'	W24x68	3' (4')	226" (19')	616" (58')
35'	W24x84	3' (4')	26' (21'6")	70' (65'6")
40'	W24x104	3' (4')	306" (25'6")	796" (74'6")

24 FEET WIDE INSTALLATIONS (2 COLUMNS)

28 FEET WIDE INSTALLATIONS (2 COLUMNS)

32 FEET WIDE INSTALLATIONS (3 COLUMNS)

36 FEET WIDE INSTALLATIONS (3 COLUMNS)

Chart Notes:

1. If the display height is between chart values shown above, use the next highest value.
2. * It is required that 4x3x3/16 steel tubing be welded to back of columns 10' from the ground and every 10' to the top of the column for bracing. (See detail on 241-0415).
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
2/3 Column With
Laterals



Nevco, Inc.
Greenville, Illinois 62246

Drawing No. 241-0407

Drawn KAB Date 12/14/2018

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180 MPH WIND ZONES

EXPOSURE C (See Note 3)

EXPOSURE B (See Note 4)

Rev A

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W16x36	2' (3')	17' (13')	34' (30')
10'	W21x44	2' (3')	19'6" (15')	38'6" (34')
12'	W18x50	2' (3')	22'6" (17')	43'6" (38')
14'	W21x55	2' (3')	26' (19'6")	49' (42'6")
16'	W21x62	2' (3')	28'6" (21'6")	53'6" (46'6")
18'	W24x68	2' (3')	31'6" (23'6")	58'6" (50'6")
20'	W24x76	2' (3')	34' (26')	63' (55')
22'	W24x84	3' (4')	28' (23')	59' (54')
25'	W24x103	3' (4')	32'6" (26'6")	66'6" (60'6")
30'	W24x131	3' (4')	38' (31'6")	77' (70'6")
35'	W24x162	3' (4')	44' (36')	88' (80')
40'	W24x192	3' (4')	49'6" (40'6")	98'6" (89'6")

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W16x40	2' (3')	18'6" (14')	35'6" (31')
10'	W16x50	2' (3')	22' (16'6")	41' (35'6")
12'	W18x55	2' (3')	25' (19')	46' (40')
14'	W21x62	2' (3')	28'6" (21'6")	51'6" (44'6")
16'	W24x68	2' (3')	32' (24')	57' (49')
18'	W24x76	2' (3')	35' (26'6")	62' (53'6")
20'	W24x84	2' (3')	38'6" (28'6")	67'6" (57'6")
22'	W24x94	3' (4')	31' (25'6")	62' (56'6")
25'	W24x104	3' (4')	34'6" (28'6")	68'6" (62'6")
30'	W24x146	3' (4')	42'6" (35')	81'6" (74')
35'	W24x192	3' (4')	49' (40')	93' (84')
40'	W18x283	3' (4')	55'6" (45'6")	104'6" (94'6")

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W14x34	2' (3')	15' (12')	32' (29')
10'	W16x40	2' (3')	17'6" (13'6")	36'6" (32'6")
12'	W21x44	2' (3')	20' (15')	41' (36')
14'	W18x50	2' (3')	22'6" (17')	45'6" (40')
16'	W21x55	3' (4')	19' (15'6")	44' (40'6")
18'	W21x62	3' (4')	21' (17'6")	48' (44'6")
20'	W24x68	3' (4')	23' (19')	52' (48')
22'	W24x76	3' (4')	24'6" (20'6")	55'6" (51'6")
25'	W24x84	3' (4')	27'6" (22'6")	61'6" (56'6")
30'	W24x104	3' (4')	32' (26'6")	71' (65'6")
35'	W24x131	3' (4')	38'6" (31'6")	82'6" (75'6")
40'	W24x162	3' (4')	43'6" (35'6")	92'6" (84'6")

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
9'	W16x40	2' (3')	18' (14')	36' (32')
10'	W21x44	2' (3')	19'6" (15')	38'6" (34')
11'	W16x50	2' (3')	21' (16')	41' (36')
12'	W18x50	2' (3')	22' (17')	43' (38')
13'	W18x55	3' (4')	18' (15')	40' (37')
14'	W21x55	3' (4')	19' (16')	42' (39')
15'	W21x62	3' (4')	20' (16'6")	44' (40'6")
20'	W24x76	3' (4')	25'6" (21')	54'6" (50')
25'	W21x101	3' (4')	31' (25'6")	65' (59'6")
30'	W24x117	3' (4')	36' (29'6")	75' (68'6")
35'	W24x146	3' (4')	41'6" (34')	85'6" (78')
40'	W24x192	3' (4')	49' (40'6")	98' (89'6")

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W12x30	2' (3')	13' (11')	30' (28')
10'	W14x34	2' (3')	15'6" (12')	34'6" (31')
12'	W16x40	2' (3')	17'6" (13'6")	38'6" (34'6")
14'	W14x48	2' (3')	20' (15'6")	43' (38'6")
16'	W18x50	2' (3')	22' (17')	47' (42')
18'	W21x55	2' (3')	24'6" (18'6")	51'6" (45'6")
20'	W21x62	2' (3')	26'6" (20')	55'6" (49')
22'	W21x68	3' (4')	22' (18'6")	53' (49'6")
25'	W24x76	3' (4')	25'6" (21')	59'6" (55')
30'	W21x101	3' (4')	30' (25')	69' (64')
35'	W24x117	3' (4')	34'6" (28'6")	78'6" (72'6")
40'	W24x146	3' (4')	39'6" (32'6")	88'6" (81'6")

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W14x34	2' (3')	14'6" (11'6")	31'6" (28'6")
10'	W16x36	2' (3')	17' (13')	36' (32')
12'	W21x44	2' (3')	19'6" (15')	40'6" (36')
14'	W18x50	2' (3')	22' (16'6")	45' (39'6")
16'	W21x55	2' (3')	24'6" (19')	49'6" (44')
18'	W21x62	2' (3')	27' (20'6")	54' (47'6")
20'	W21x68	2' (3')	29'6" (22'6")	58'6" (51'6")
22'	W18x76	3' (4')	24'6" (20')	55'6" (51')
25'	W24x84	3' (4')	27' (22'6")	61' (56'6")
30'	W24x104	3' (4')	33'6" (27'6")	72'6" (66'6")
35'	W24x131	3' (4')	38'6" (32')	82'6" (76')
40'	W24x162	3' (4')	44' (36')	93' (85')

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W12x26	2' (3')	12' (10')	29' (27')
10'	W14x30	2' (3')	13'6" (11')	32'6" (30')
12'	W18x35	2' (3')	15'6" (12')	36'6" (33')
14'	W16x40	2' (3')	17'6" (13'6")	40'6" (36'6")
16'	W21x44	3' (4')	15' (12'6")	40' (37'6")
18'	W18x50	3' (4')	16'6" (14')	43'6" (41')
20'	W21x55	3' (4')	18' (15')	47' (44')
22'	W21x62	3' (4')	19'6" (16'6")	50'6" (47'6")
25'	W21x68	3' (4')	21'6" (18')	55'6" (52')
30'	W24x84	3' (4')	25'6" (21')	64'6" (60')
35'	W24x104	3' (4')	30'6" (25'6")	74'6" (69'6")
40'	W24x117	3' (4')	34'6" (28'6")	83'6" (77'6")

Column and Foundation Requirements (Based on ASCE 7-10)				
Display Height	Braced Column*	Pier Dia.	Pier Depth	Column Length
9'	W14x30	2' (3')	14' (11'6")	32' (29'6")
10'	W14x34	2' (3')	15' (12')	34' (31')
11'	W16x36	2' (3')	16' (12'6")	36' (32'6")
12'	W16x40	2' (3')	17' (13'6")	38' (34'6")
13'	W14x43	3' (4')	14' (12')	36' (34')
14'	W21x44	3' (4')	15' (12'6")	38' (35'6")
15'	W16x50	3' (4')	15'6" (13')	39'6" (37')
20'	W21x62	3' (4')	20' (17')	49' (46')
25'	W24x76	3' (4')	24'6" (20')	58'6" (54')
30'	W24x94	3' (4')	28'6" (23'6")	67'6" (62'6")
35'	W24x104	3' (4')	33' (27')	77' (71')
40'	W24x146	3' (4')	39' (32')	88' (81')

24 FEET WIDE INSTALLATIONS (2 COLUMNS)

28 FEET WIDE INSTALLATIONS (2 COLUMNS)

32 FEET WIDE INSTALLATIONS (3 COLUMNS)

36 FEET WIDE INSTALLATIONS (3 COLUMNS)

Chart Notes:

- If the display height is between chart values shown above, use the next highest value.
- * It is required that 4x3x3/16 steel tubing be welded to back of columns 10' from the ground and every 10' to the top of the column for bracing. (See detail on 241-0415).
- 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.
- 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
2/3 Column With Laterals



Nevco, Inc.
Greenville, Illinois 62246

Drawing No. 241-0407

Drawn KAB Date 12/14/2018

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