



	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			
10'	W8x28	W8x21	2 (3)	9'6" (8')	28'6" (27')			
12'	W10x33	W14x22	2 (3)	10'6" (9')	31'6" (30')			
14'	W10x39	W10x26	2 (3)	11' (9'6")	34' (32'6")			
16'	W10x45	W12x30	2 (3)	12' (10')	37' (35')			
18'	W10x49	W14x30	2 (3)	12'6" (10'6")	396" (376")			
20'	W12x53	W14x34	2 (3)	13'6" (11')	42'6" (40')			
22"	W10x60	W16x36	2 (3)	14'6" (12')	45'6" (43')			
25	W12x65	W16x40	2 (3)	16' (12'6")	50' (46'6")			
30'	W12x87	W16x50	2 (3)	19' (14'6")	58' (53'6")			
35	W12x106	W21x55	3' (4')	17'6" (14'6")	616" (586")			
40'	W14x120	W21x68	3' (4')	19'6" (16'6")	686" (656")			

30 FEET WIDE INSTALLATIONS (see note 5)

	EXPOSURE B (See Note 4)									
	Column and Foundation Requirements (Based on ASCE 7-10)									
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length					
10'	W8x24	W8x18	2' (3')	8'6" (7')	27'6" (26')					
12'	W12x26	W8x21	2' (3')	9' (7'6")	30 (286")					
14'	W10x33	W10x22	2' (3')	96" (86")	32'6" (31'6")					
16'	W8x35	W14x22	2' (3')	10'6" (9')	356" (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	2' (3')	13' (11')	47' (45')					
30'	W12x72	W16x40	2' (3')	15' (12')	54' (51')					
35'	W12x96	W16x50	3' (4')	146 (12)	58' (56')					
40'	W12x106	W18x55	3' (4')	16' (13'6")	65 (626")					

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' (8')	26' (25')		
10"	W12x30	W10x22	2' (3')	10' (8'6")	29' (27'6")		
12'	W10x33	W10x26	2' (3')	11' (9'6")	32' (30'6")		
14'	W10x39	W12x26	2' (3')	11'6" (10')	34'6" (33')		
16'	W10x45	W12x30	2' (3')	12' (10'6")	37" (35'6")		
18'	W10x49	W14x34	2' (3')	13'6" (11')	40'6" (38')		
20'	W10x60	W18x35	2' (3')	14'6" (12')	43'6" (41')		
22'	W12x65	W16x40	2' (3')	16' (12'6")	47' (43'6")		
25	W12x72	W21x44	2' (3')	17'6" (13'6")	51'6" (47'6")		
30'	W12x96	W18x55	3' (4')	16' (13'6")	55' (52'6")		
35	W14x109	W21x62	3' (4')	19' (16')	63' (60')		
40'	W14x132	W24x68	3' (4')	21' (18')	70' (67')		

32 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"	W8x21	W10x17	2' (3')	8" (7")	25' (24')		
10'	W8x24	W8x18	2' (3')	86" (76")	27'6" (26'6")		
12'	W12x30	W8x21	2' (3')	9'6" (8')	30'6" (29')		
14'	W10x33	W10x22	2' (3')	10' (8'6")	33 (316")		
16'	W14x39	W10x26	2' (3')	10'6" (9')	356" (34')		
18'	W10x45	W12x26	2' (3')	11'6" (10')	386" (37')		
20'	W8x48	W12x30	2' (3')	12' (10'6")	41' (39'6")		
22'	W12x53	W14x30	2' (3')	12'6" (11')	436" (42')		
25'	W10x60	W18x35	2' (3')	14' (11'6")	48' (45'6")		
30'	W10x77	W14x43	3' (4')	13' (11'6")	52' (50'6")		
35'	W12x96	W18x50	3' (4')	15'6" (13')	59'6" (57')		
40'	W14x109	W21x55	3' (4')	17'6" (14'6")	66'6" (63'6")		

Column and Foundation Requirements (Based on ASCE 7-10)								
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length			
8'	W8 x 24	W8 x 21*	2 (3)	9' (8')	26 (25)			
10"	W10 x 33	W10 x 22*	2 (3)	8'6" (8')	27'6" (27')			
12'	W10 x 33	W10 x 26+	2 (3)	9'6" (8'6")	306" (296")			
14'	W10 x 39	W12 x 26+	2' (3')	10' (9')	33' (32')			
16'	W10 x 45	W12 x 30+	2' (3')	10'6" (9'6")	35'6" (34'6")			
18'	W10 x 49	W14 x 34+	2 (3)	11' (10')	38' (37')			
20'	W10 x 60	W16 x 36+	2 (3)	12' (10'6")	41' (39'6")			
22'	W12 x 65	W16 x 40+	3' (4')	12'6" (11')	43'6" (42')			
25	W12 x 72	W21 x 44+	3' (4')	14' (12')	48' (46')			
30'	W12 x 96	W18 x 55+	3' (4')	16' (13'6")	55' (52'6")			
35	W14 x 109	W21 x 62+	3' (4')	18' (15'6")	62' (59'6")			
40'	W14 x 132	W24 x 68+	3' (4')	21'6" (18')	70'6" (67')			

36 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'	W8 x 21	W10 x 17*	2' (3')	8' (7')	25' (24')		
10'	W8 x 24	W8 x 18*	2' (3')	76" (7')	26'6" (26')		
12'	W12 x 30	W8 x 21+	2' (3')	8' (7'6")	29' (286")		
14'	W10 x 33	W10 x 22+	2' (3')	8'6" (8')	31'6" (31')		
16'	W10 x 39	W10 x 26+	2' (3')	9' (8'6")	34' (33'6")		
18'	W10 x 45	W12 x 26+	2' (3')	10' (9')	37' (36')		
20'	W10 x 49	W12 x 30+	2' (3')	10'6" (9'6")	39'6" (38'6")		
22'	W12 x 53	W14 x 34+	3' (4')	11' (10')	42' (41')		
25'	W10 x 60	W18 x 35+	3' (4')	116" (106")	45'6" (44'6")		
30'	W10 x 77	W14 x 43+	3' (4')	13' (11'6")	52' (50'6")		
35'	W12 x 96	W18 x 50+	3' (4')	15' (12'6")	59' (56'6")		
40'	W14 x 109	W21 x 62+	3' (4')	17'6" (15')	66'6" (64')		

### **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.

5. For 3604 scoreboard subtract 5' from column length for outer columns.

Outdoor Scoreboard
Pier Installation
4 Column
Multi-Section



Nevco, Inc. Greenville, Illinois 62246

Drawing No. 241-0408

Drawn KAB Date 12/14/18 Sheet of 3 7

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## 120 MPH WIND ZONES

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			
10"	W10x33	W14x22	2' (3')	10'6" (9')	29'6" (28')			
12'	W10x39	W12x26	2' (3')	11'6" (10')	32'6" (31')			
14'	W14x43	W12x30	2' (3')	12' (10'6")	35' (33'6")			
16'	W10x49	W14x34	2' (3')	13'6" (11')	38'6" (36')			
18'	W12x53	W18x35	2' (3')	15' (12')	42' (39')			
20'	W14x61	W16x40	2' (3')	16' (12'6")	45' (41'6")			
22"	W12x65	W14x43	3' (4')	136" (11'6")	44'6" (42'6")			
25	W12x79	W16x50	3' (4')	15' (12'6")	49' (46'6")			
30'	W21x101	W21x55	3' (4')	176" (14'6")	56'6" (53'6")			
35	W14x120	W21x68	3' (4')	20'6" (17'6")	64'6" (61'6")			
40'	W14x145	W24x76	3' (4')	23' (19'6")	72' (68'6")			

30 FEET WIDE INSTALLATIONS (see note 5)

EXPOSURE B (See Note 4)							
Column and Fo	undation Requireme	ents (Based o	on ASCE 7-10)				
Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length			
W12x26	W8x21	2' (3')	9' (8')	28' (27')			
W10x33	W10x22	2 (3)	10' (8'6")	31' (29'6")			
W8x35	W10x26	2 (3)	10'6" (9')	33'6" (32')			
W14x43	W12x26	2 (3)	11'6" (10')	36'6" (35')			
W14x48	W12x30	2 (3)	12' (10'6")	39' (37'6")			
W10x49	W14x30	2 (3)	13' (11')	42' (40')			
W10x60	W14x34	3' (4')	11'6" (10')	42'6" (41')			
W12x65	W16x40	3' (4')	12' (11')	46' (45')			
W12x79	W14x48	3' (4')	14' (12')	53' (51')			
W12x106	W21x55	3' (4')	16'6" (14')	60'6" (58')			
W14x120	W21x62	3' (4')	19' (16')	68' (65')			
	Column and Fo Unbraced Column W12x26 W10x33 W8x35 W14x43 W14x48 W10x49 W10x60 W12x65 W12x79	Column and Foundation Requirement Unbraced Column Braced Column*  W12x26 W8x21  W10x33 W10x22  W8x35 W10x26  W14x43 W12x26  W14x48 W12x30  W10x49 W14x30  W10x60 W14x34  W12x65 W16x40  W12x79 W14x48  W12x106 W21x55	Column and Foundation Requirements (Based of Unbraced Column   Braced Column*   Pier Dia.   W12x26   W8x21   2' (3')   W10x33   W10x22   2' (3')   W8x35   W10x26   2' (3')   W14x43   W12x26   2' (3')   W14x48   W12x30   2' (3')   W10x49   W14x30   2' (3')   W10x60   W14x34   3' (4')   W12x65   W16x40   3' (4')   W12x79   W14x48   3' (4')   W12x106   W21x55   3' (4')	Column and Foundation Requirements (Based on ASCE 7-10)  Unbraced Column Braced Column* Pier Dia. Pier Depth  W12x26 W8x21 2' (3') 9' (8')  W10x33 W10x22 2' (3') 10' (8'6")  W8x35 W10x26 2' (3') 10'6" (9')  W14x43 W12x26 2' (3') 11'6" (10')  W14x48 W12x30 2' (3') 12' (10'6")  W10x49 W14x30 2' (3') 13' (11')  W10x60 W14x34 3' (4') 11'6" (10')  W12x65 W16x40 3' (4') 12' (11')  W12x79 W14x48 3' (4') 14' (12')  W12x106 W21x55 3' (4') 16'6" (14')			

	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')	33' (31')			
14'	W10x45	W14x30	2' (3')	13' (11')	36' (34')			
16'	W12x53	W14x34	2' (3')	146" (116")	39'6" (36'6")			
18'	W10x60	W16x40	2' (3')	16' (12'6")	43' (39'6")			
20'	W12x65	W14x43	2' (3')	176" (136")	46'6" (42'6")			
22'	W12x72	W14x48	3' (4')	14'6" (12')	45'6" (43')			
25	W12x87	W18x50	3' (4')	16' (13'6")	50' (47'6")			
30'	W12x106	W21x62	3' (4')	186" (156")	57'6" (54'6")			
35	W14x132	W18x76	3' (4')	22" (18'6")	66' (62'6")			
40'	W14x159	W24x84	3' (4')	25' (21')	74' (70')			

32 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	W8x18	2' (3')	9' (7'6")	26' (24'6")		
10'	W8x28	W8x21	2' (3')	96" (8')	286" (27')		
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	W14x30	2' (3')	12'6" (11')	396" (38')		
20'	W12x53	W14x34	2' (3')	14' (11'6")	43' (40'6")		
22'	W10x60	W16x36	3' (4')	12' (10'6")	43' (41'6")		
25'	W12x72	W16x40	3' (4')	13' (11'6")	47' (45'6")		
30'	W12x87	W18x50	3' (4')	15' (12'6")	54' (51'6")		
35'	W14x109	W21x62	3' (4')	18' (15')	62' (59')		
40'	W14x132	W21x68	3' (4')	20'6" (17')	69'6" (66')		

	Column and Foundation Requirements (Based on ASCE 7-10)									
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length					
8'	W8 x 28	W10 x 22*	2' (3')	10' (8'6")	27' (25'6")					
10"	W10 x 33	W10 x 26*	3' (4')	96" (86")	28'6" (27'6")					
12'	W10 x 39	W12 x 26+	3' (4')	10'6" (9')	31'6" (30')					
14'	W14 x 48	W14 x 30+	3' (4')	11' (10')	34' (33')					
16'	W12 x 53	W14 x 34+	3' (4')	11'6" (10'6")	36'6" (35'6")					
18'	W10 x 60	W16 x 40+	3' (4')	12'6" (11')	39'6" (38')					
20"	W12 x 65	W14 x 43+	3' (4')	13'6" (12')	42'6" (41')					
22"	W12 x 72	W16 x 50+	3' (4')	146" (126")	45'6" (43'6")					
25	W12 x 87	W18 x 55+	3' (4')	166" (136")	50'6" (47'6")					
30'	W14 x 109	W21 x 62+	3' (4')	19' (16')	58' (55')					
35	W14 x 132	W24 x 68+	3' (4')	21'6" (18')	65'6" (62')					
40'	W14 x 159	W24 x 84+	3' (4')	25'6" (21')	74'6" (70')					
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36 FEET WIDE INSTALLATIONS

Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W8 x 24	W8 x 18*	2' (3')	9' (7'6")	26' (24'6")
10'	W8 x 28	W10 x 22*	3' (4')	86" (76")	276" (266")
12'	W10 x 33	W14 x 22+	3' (4')	9' (8')	30' (29')
14'	W10 x 39	W12 x 26+	3' (4')	96" (86")	326" (31'6")
16'	W10 x 45	W12 x 30+	3' (4')	10' (9')	35' (34')
18'	W10 x 49	W14 x 30+	3' (4')	11' (9'6")	38' (36'6")
20'	W12 x 53	W14 x 34+	3' (4')	11'6" (10'6")	40'6" (39'6")
22'	W14 x 61	W16 x 36+	3' (4')	12' (11')	43' (42')
25'	W12 x 72	W14 x 43+	3' (4')	13' (11'6")	47" (45'6")
30'	W12 x 87	W18 x 50+	3' (4')	15'6" (13')	54'6" (52')
35'	W12 x 106	W21 x 55+	3' (4')	176" (14'6")	61'6" (58'6")
40'	W14 x 132	W24 x 68+	3' (4')	206" (176")	69'6" (66'6")

## **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.

5. For 3604 scoreboard subtract 5' from column length for outer columns.

Outdoor Scoreboard
Pier Installation
4 Column
Multi-Section



Nevco, Inc. Greenville, Illinois 62246

Drawing No. 241-0408

Drawn KAB

KAB | 12/14/18

Sheet of 4 7

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EXPOSURE C (See Note 3)							
	Column and Fo	undation Requireme	nts (Based o	on ASCE 7-10)			
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
10"	W10x33	W10x26	2' (3')	11' (9'6')	30' (28'6")		
12'	W10x39	W12x30	2' (3')	12 (106")	33 (316")		
14'	W14x48	W14x30	2' (3')	136" (11")	36'6" (34')		
16'	W12x53	W18x35	2' (3')	15 (12)	40' (37')		
18'	W14x61	W16x40	2' (3')	166 (126")	436" (396")		
20'	W12x65	W21x44	2' (3')	176" (14")	466" (43')		
22'	W12x72	W16x50	3' (4')	15 (126")	46' (43'6")		
25	W12x87	W18x55	3' (4')	166" (14")	50'6" (48')		
30'	W14x109	W21x62	3' (4')	19' (16')	58' (55')		
35	W14x132	W24x76	3' (4')	226" (19')	66'6" (63')		
40'	W14x159	W24x94	3' (4')	256" (216")	74'6" (70'6")		

30 FEET WIDE **INSTALLATIONS** (see note 5)

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	
10'	W8x28	W10x22	2' (3')	9'6" (8'6")	28'6" (27'6")	
12'	W10x33	W10x26	2' (3')	10'6" (9')	31'6" (30')	
14'	W10x39	W12x26	2' (3')	11' (96')	34' (32'6")	
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	3' (4')	12' (11')	43 (42)	
25'	W12x72	W14x43	3' (4')	136" (116")	476" (456")	
30'	W12x87	W18x50	3' (4')	156" (13')	54'6" (52')	
35'	W14x109	W21x62	3' (4')	18'6" (15'6")	626" (596")	
40'	W14x132	W24x68	3' (4')	21' (17'6")	70' (66'6")	

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')	10'6" (9')	27'6" (26')			
10'	W10x39	W12x26	2' (3')	11'6" (10')	30'6" (29')			
12'	W14x43	W12x30	2' (3')	13' (11')	34' (32')			
14'	W10x49	W14x34	2' (3')	146" (116")	37'6" (34'6")			
16'	W12x53	W16x36	2' (3')	16' (12'6")	41' (37'6")			
18'	W12x65	W14x43	2' (3')	176" (136")	44'6" (40'6")			
20'	W12x72	W16x50	2' (3')	19' (15')	48' (44')			
22'	W12x79	W18x50	3' (4')	16' (13'6")	47' (44'6")			
25	W12x96	W21x55	3' (4')	17'6" (15')	51'6" (49')			
30'	W14x109	W21x68	3' (4')	20'6" (17')	59'6" (56')			
35	W14x145	W24x84	3' (4')	246" (206")	68'6" (64'6")			
40'	W14x176	W24x94	3' (4')	276" (23')	766" (72')			

32 FEET WIDE
52 PDDI WIDD
INSTALLATIONS

	Column and Fo	oundation 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 (86")	29' (27'6")
12'	W8x35	W10x26	2' (3')	11' (9'6")	32' (30'6")
14'	W12x40	W12x26	2' (3')	11'6" (10')	34'6" (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	3' (4')	13' (11'6")	44' (42'6")
25'	W12x79	W14x48	3' (4')	146" (12')	48'6" (46')
30'	W12x96	W18x55	3' (4')	166" (14")	55'6" (53')
35'	W14x120	W21x68	3' (4')	20' (16'6")	64' (60'6")
40'	W14x145	W24x76	3' (4')	22'6" (19')	71'6" (68')
			1		

Column and Foundation Requirements (Based on ASCE 7-10)								
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length			
8'	W10 x 33	W10 x 26*	2' (3')	11' (9')	28' (26')			
10"	W10 x 39	W12 x 26*	3' (4')	10' (9')	29' (28')			
12'	W14 x 43	W12 x 30+	3' (4')	11' (10')	32' (31')			
14'	W10 x 49	W14 x 34+	3' (4')	11'6" (10'6")	34'6" (33'6")			
16'	W10 x 60	W16 x 36+	3' (4')	12'6" (11')	37'6" (36')			
18'	W12 x 65	W14 x 43+	3' (4')	136" (12')	40'6" (39')			
20'	W12 x 72	W16 x 50+	3' (4')	15 (126")	44' (41'6")			
22	W12 x 79	W18 x 50+	3' (4')	16' (13'6")	47' (44'6")			
25	W12 x 96	W21 x 55+	3' (4')	18' (15')	52' (49')			
30'	W12 x 120	W21 x 68+	3' (4')	21' (17'6")	60' (56'6")			
35	W14 x 145	W24 x 76+	3' (4')	24' (20')	68' (64')			
40'	W14 x 176	W21 x 101+	3' (4')	28' (23'6")	77' (72'6")			
30' 35'	W12 x 120 W14 x 145	W21 x 68+ W24 x 76+	3' (4') 3' (4')	21' (17'6") 24' (20')	60' (56'6") 68' (64')			

36 FEET WIDE **INSTALLATIONS** 

Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length
8"	W8 x 24	W8 x 21*	2' (3')	96" (8')	26'6" (25')
10'	W10 x 33	W10 x 22*	3' (4')	86" (8')	27'6" (27')
12'	W8 x 35	W10 x 26+	3' (4')	96" (86")	30'6" (29'6")
14'	W14 x 43	W12 x 26+	3' (4')	10' (9')	33' (32')
16'	W14 x 48	W14 x 30+	3' (4')	11' (96")	36' (34'6")
18'	W12 x 53	W14 x 34+	3' (4')	11'6" (10'6")	38'6" (37'6")
20'	W10 x 60	W16 x 36+	3' (4')	12' (11')	41' (40')
22'	W12 x 65	W16 x 40+	3' (4')	13' (11'6")	44' (42'6")
25'	W12 x 79	W16 x 50+	3' (4')	146" (12')	48'6" (46')
30'	W12 x 96	W21 x 55+	3' (4')	17' (14')	56' (53')
35'	W14 x 109	W21 x 62+	3' (4')	19' (16')	63' (60')
40'	W14 x 145	W24 x 76+	3' (4')	22'6" (19')	71'6" (68')

#### **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. 5. For 3604 scoreboard subtract 5' from column length for outer columns.

Outdoor Scoreboard Pier Installation 4 Column Multi-Section



Nevco, Inc. Greenville, Illinois 62246

Drawing No. 241-0408

Drawn Sheet 5 of 7 12/14/18 KAB

EXPOSURE C (See Note 3)							
	Column and Fo	oundation Requireme	ents (Based	on ASCE 7-10)			
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
10'	W10x39	W12x30	2' (3')	12'6" (10'6")	31'6" (29'6")		
12'	W14x48	W14x34	3' (4')	11'6" (10'6")	32'6" (31'6")		
14'	W12x53	W16x36	3' (4')	12'6" (11')	35'6" (34')		
16'	W14x61	W14x43	3' (4')	14' (12')	39' (37')		
18'	W12x72	W16x50	3' (4')	15' (12'6")	42 (396")		
20'	W12x79	W18x50	3' (4')	16'6" (14')	45'6" (43')		
22'	W12x96	W21x55	3' (4')	17'6" (15')	48'6" (46')		
25'	W21x101	W21x62	3' (4')	196" (166")	53'6" (50'6")		
30'	W24x131	W24x68	3' (4')	23' (19')	62' (58')		
35'	W14x159	W24x94	3' (4')	276" (226")	71'6" (66'6")		
40'	W14x193	W24x104	3' (4')	306" (256")	79'6" (74'6")		

30 FEET WIDE **INSTALLATIONS** (see note 5)

EXPOSURE B (See Note 4)						
	Column and Fo	oundation Requireme	ents (Based	on ASCE 7-10)		
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
10'	W10x33	W10x26	2' (3')	11' (7'6")	31' (29'6")	
12'	W10x39	W12x26	2' (3')	11'6" (8'6")	33'6" (32')	
14'	W10x45	W12x30	2' (3')	126" (9')	36'6" (34'6")	
16'	W10x49	W14x34	2' (3')	14' (9'6")	40' (37'6")	
18'	W10x60	W16x36	2' (3')	15'6" (10')	43'6" (40')	
20'	W12x65	W16x40	2' (3')	17' (10'6")	47' (43')	
22'	W12x72	W21x44	2' (3')	18' (11')	50' (46')	
25'	W18x86	W18x50	2' (3')	20'6" (12')	55'6" (51')	
30'	W12x106	W21x62	2' (3')	23'6" (12')	63'6" (58'6")	
35'	W14x132	W24x68	3' (4')	22" (13'6")	67' (63'6")	
40'	W14x159	W24x84	3' (4')	25' (13'6")	75 (71')	

Column and Foundation Requirements (Based on ASCE 7-10)								
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length			
8'	W16x36	W12x26	2' (3')	12' (10'6")	29' (27'6")			
10'	W12x40	W14x30	2' (3')	13'6" (11')	32'6" (30')			
12'	W10x49	W18x35	2' (3')	15'6" (12')	366" (33')			
14'	W10x60	W16x40	2' (3')	176" (136")	40'6" (36'6")			
16'	W12x65	W21x44	2' (3')	19' (15')	44' (40')			
18'	W14x74	W18x50	3' (4')	166" (136")	43'6" (40'6")			
20'	W18x86	W18x55	3' (4')	18' (15')	47' (44')			
22'	W12x96	W21x62	3' (4')	19' (16')	50' (47')			
25'	W14x109	W21x68	3' (4')	21' (17'6")	55' (51'6")			
30'	W18x143	W24x76	3' (4')	246" (206")	63'6" (59'6")			
35'	W14x176	W21x101	3' (4')	296" (246")	73'6" (68'6")			
40'	W14x211	W24x117	3' (4')	33'6" (27'6")	82'6" (76'6")			

32 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'	W12x30	W10x22	2' (3')	10'6" (9')	28'6" (27')	
10'	W10x33	W12x26	2' (3')	11'6" (9'6")	31'6" (29'6")	
12'	W12x40	W12x30	2' (3')	12' (10'6")	34' (32'6")	
14'	W14x48	W14\x34	2' (3')	13'6" (11')	37'6" (35')	
16'	W12x53	W18x35	2' (3')	15' (12')	41' (38')	
18'	W14x61	W16x40	2' (3')	17' (13')	45' (41')	
20'	W12x65	W21x44	2' (3')	18' (14')	48' (44')	
22'	W12x79	W16x50	2' (3')	196" (156")	51'6" (47'6")	
25'	W12x96	W18x55	2' (3')	22' (17')	57' (52')	
30'	W14x109	W21x62	3' (4')	20" (16'6")	60' (56'6")	
35'	W14x145	W24x76	3' (4')	24' (20')	69' (65')	
40'	W14x176	W24x94	3' (4')	27' (22'6")	77' (72'6")	
			•			

Column and Foundation Requirements (Based on ASCE 7-10)								
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length			
8'	W16 x 36	W12 x 26*	2' (3')	12" (10'6")	29' (27'6")			
10'	W14 x 43	W14 x 30*	3' (4')	11' (10')	30' (29')			
12'	W10 x 49	W18 x 35+	3' (4')	12' (11')	33' (32')			
14'	W10 x 60	W16 x 40+	3' (4')	136" (116")	36'6" (34'6")			
16'	W12 x 65	W21 x 44+	3' (4')	15' (12'6")	40' (37'6")			
18'	W14 x 74	W18 x 50+	3' (4')	166" (136")	43'6" (40'6")			
20'	W18 x 86	W21 x 55+	3' (4')	18' (15')	47' (44')			
22"	W18 x 97	W21 x 62+	3' (4')	19'6" (16')	50'6" (47')			
25'	W14 x 109	W21 x 68+	3' (4')	21'6" (18')	556" (52')			
30'	W18 x 143	W24 x 84+	3' (4')	25' (21')	64' (60')			
35'	W18 x 175	W21 x 101+	3' (4')	286" (236")	72'6" (67'6")			
40'	W14 x 233	W24 x 117+	3' (4')	34' (28')	83' (77')			

36 FEET WIDE **INSTALLATIONS** 

Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W12x30	W10x22	2' (3')	10'6" (9')	28'6" (27')
10'	W10x33	W12x26	2' (3')	11'6" (9'6")	31'6" (29'6")
12'	W12x40	W12x30	2' (3')	12'6" (10'6")	34'6" (32'6")
14'	W14x48	W14x34	2' (3')	13'6" (11'6")	376" (356")
16'	W12x53	W16x36	2' (3')	15' (12')	41' (38')
18'	W14x61	W16x40	2' (3')	16'6" (13')	44'6" (41')
20'	W12x72	W21x44	2' (3')	186" (146")	48'6" (44'6")
22'	W12x79	W18x50	3' (4')	15'6" (13')	476" (45)
25'	W12x96	W18x55	3' (4')	17' (14'6")	52' (49'6")
30'	W14x109	W21x68	3' (4')	20' (17')	60' (57')
35'	W14x145	W24x76	3' (4')	23' (19')	68' (64')
40'	W14x176	W24x94	3' (4')	27' (22')	77' (72'6")

### **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.

5. For 3604 scoreboard subtract 5' from column length for outer columns.

Outdoor Scoreboard Pier Installation 4 Column Multi-Section



Nevco, Inc. Greenville, Illinois 62246

Drawing No. 241-0408

Drawn KAB

12/14/18

Sheet 6 of 7

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			
10'	W14x48	W18x35	2' (3')	16' (12'6")	35' (31'6")			
12'	W10x60	W16x40	3' (4')	14' (12')	35' (33')			
14'	W12x65	W16x50	3' (4')	15'6" (13')	38'6" (36')			
16	W18x76	W18x55	3' (4')	176" (146")	426" (396")			
18'	W18x86	W21x55	3' (4')	19' (16')	46' (43')			
20'	W18x97	W21x62	3' (4')	20'6" (17')	49'6" (46')			
22"	W24x104	W21x68	3' (4')	22'6" (18'6")	53'6" (49'6")			
25	W18x130	W24x76	3' (4')	25' (20'6")	59' (54'6")			
30'	W14x159	W24x94	3' (4')	29' (24')	68' (63')			
35	W21x201	W24x117	3' (4')	35' (28'6")	79' (72'6")			
40'	W14x257	W24x146	3' (4')	39' (32'6")	88' (81'6")			

30 FEET WIDE
INSTALLATIONS
(see note 5)

	EXPOSURE B (See Note 4)								
	Column and Foundation Requirements (Based on ASCE 7-10)								
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length				
10'	W10x39	W12x30	2' (3')	12'6" (10'6")	31'6" (29'6")				
12'	W14x48	W14x34	3' (4')	11'6" (10'6")	32'6" (31'6")				
14'	W12x53	W16x36	3' (4')	12'6" (11')	35'6" (34')				
16'	W14x61	W14x43	3' (4')	14' (12')	39' (37')				
18'	W14x68	W16x50	3' (4')	15' (12'6")	42' (39'6")				
20'	W12x79	W18x50	3' (4')	166" (14')	45'6" (43')				
22'	W12x96	W21x55	3' (4')	18' (15')	49' (46')				
25'	W21x101	W21x62	3' (4')	20' (16'6")	54' (50'6")				
30'	W24x131	W18x76	3' (4')	23' (19')	62' (58')				
35'	W18x175	W24x94	3' (4')	28' (23')	72' (67')				
40'	W21x201	W24x104	3' (4')	31'6" (26')	80'6" (75')				

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')	15' (12')	32' (29')	
10"	W12x53	W16x40	2' (3')	17' (13')	36' (32')	
12'	W14x61	W21x44	2' (3')	19'6" (15')	40'6" (36')	
14'	W16x67	W18x50	2' (3')	22' (17')	45' (40')	
16'	W18x76	W21x55	2' (3')	24'6" (18'6")	49'6" (43'6")	
18'	W18x97	W21x62	3' (4')	21' (17')	48' (44')	
20'	W21x101	W21x68	3' (4')	22'6" (18'6")	51'6" (47'6")	
22'	W21x111	W18x76	3' (4')	24'6" (20')	55'6" (51')	
25	W24x131	W24x84	3' (4')	27" (22'6")	61' (56'6")	
30'	W18x175	W24x103	3' (4')	31'6" (26')	70'6" (65')	
35	W14x233	W24x131	3' (4')	38' (31')	82 (75)	
40'	W14x283	W24x162	3' (4')	42'6" (35')	91'6" (84')	

32 FEET WIDE
INSTALLATIONS

Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length	
8'	W10x33	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" (13'6")	40" (36'6")	
16'	W12x65	W21x44	2' (3')	19' (14'6")	44' (39'6")	
18'	W14x74	W18x50	3' (4')	16'6" (13'6")	43'6" (40'6")	
20'	W18x86	W18x55	3' (4')	17'6" (15')	46'6" (44')	
22'	W12x96	W21x62	3' (4')	19' (16')	50' (47')	
25'	W14x109	W21x68	3' (4')	21'6" (18')	55'6" (52')	
30'	W18x143	W24x84	3' (4')	25' (21')	64' (60')	
35'	W21x182	W21x101	3' (4')	30' (25')	74' (69')	
40'	W14x233	W24x117	3' (4')	34' (28')	83' (77')	

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

Column and Foundation Requirements (Based on ASCE 7-10)							
Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length		
8'	W14 x 43	W14 x 34*	2' (3')	15' (12')	32 (29)		
10"	W12 x 53	W16 x 40*	3' (4')	13'6" (11'6")	32'6" (30'6")		
12'	W14 x 61	W21 x 44+	3' (4')	15' (12'6")	36' (33'6")		
14'	W16 x 67	W18 x 50+	3' (4')	17' (14')	40' (37')		
16'	W18 x 76	W21 x 55+	3' (4')	19' (15'6")	44' (40'6")		
18'	W12 x 96	W21 x 62+	3' (4')	20'6" (17')	47'6" (44')		
20"	W21 x 101	W21 x 68+	3' (4')	23' (19')	52' (48')		
22"	W24 x 117	W24 x 76+	3' (4')	24'6" (20'6")	55'6" (51'6")		
25	W18 x 143	W24 x 84+	3' (4')	276" (226")	61'6" (56'6")		
30'	W14 x 176	W24 x 104+	3' (4')	32" (26'6")	71' (65'6")		
35	W14 x 233	W24 x 131+	3' (4')	36'6" (30')	80'6" (74')		
40'	W14 x 283	W24 x 162+	3' (4')	43'6" (35'6")	92'6" (84'6")		

36 FEET WIDE **INSTALLATIONS** 

Display Height	Unbraced Column	Braced Column*	Pier Dia.	Pier Depth	Column Length
8'	W16 x 36	W12 x 26*	2' (3')	12' (10')	29' (27')
10'	W12 x 40	W14 x 30*	3' (4')	11' (10')	30' (29')
12'	W10 x 49	W18 x 35+	3' (4')	12' (11')	33' (32')
14'	W10 x 60	W16 x 40+	3' (4')	13'6" (11'6")	36'6" (34'6")
16'	W12 x 65	W21 x 44+	3' (4')	15 (126")	40' (37'6")
18'	W14 x 74	W18 x 50+	3' (4')	16'6" (13'6")	43'6" (40'6")
20'	W18 x 86	W21 x 55+	3' (4')	18' (15')	47' (44')
22'	W18 x 97	W21 x 62+	3' (4')	196" (16')	50'6" (47')
25'	W14 x 109	W21 x 68+	3' (4')	21'6" (18')	556" (52')
30'	W18 x 143	W24 x 84+	3' (4')	256" (21')	64'6" (60')
35'	W14 x 176	W21 x 101+	3' (4')	29' (24')	73' (68')
40'	W14 x 233	W24 x 117+	3' (4')	34'6" (28'6")	83'6" (77'6")

### **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.

5. For 3604 scoreboard subtract 5' from column length for outer columns.

Outdoor Scoreboard Pier Installation 4 Column Multi-Section



Nevco, Inc. Greenville, Illinois 62246

241-0408

Sheet 7<sup>of</sup> 7

Drawing No.

12/14/18

Drawn

KAB

4