

В

## Exposure C 30 FEET WIDE INSTALLATIONS

Column and Pier Requirements (Based on ASCE 7-05)											
7	Display Height	Pier Dia	Pier Depth	Col Length	Unbraced Colu	Braced Column					
	10	2' (3')	10'6" (9')	30'6" (29')	W10 x 33	W10 x 22					
	12	2' (3')	11' (9'6")	33' (31'6")	W10 x 39	W10 x 26					
	14	2' (3')	12' (10')	36' (34')	W14 x 43	W12 x 30					
	16	2' (3')	13' (11')	39' (37')	W10 x 49	W14 x 30					
	18	2' (3')	14' (11'6")	42' (39'6")	W12 x 53	W14 x 34					
	20	2' (3')	15'6" (12')	45'6" (42')	W10 x 60	W16 x 36					
	22	2' (3')	16'6" (13')	48'6" (45')	W12 x 65	W16 x 40					
	25	2' (3')	18'6" (14'6")	53'6" (49'6")	W12 x 79	W14 x 48					
	30	2' (3')	21'6" (16'6")	61'6" (56'6")	W12 x 96	W18 x 55					
	35	3' (4')	20' (16'6")	65' (61'6")	W14 x 120	W21 x 68					
	40	3' (4')	22' (18'6")	72' (68'6")	W14 x 145	W24 x 76					

### Exposure C 32 FEET WIDE INSTALLATIONS

ľ	Column and Pier Requirements (Based on ASCE 7-05 Exposure C for 90mph Wind Load)										
_	Display Height	Pier Dia	Pier Depth	Col Length	Length Unbraced Column Braced Column						
ᅡ	8	2' (3')	10' (8'6")	28' (26'6")	W8 x 28	W10 x 22					
	10	2' (3')	11' (9'6")	31' (29'6")	W10 x 33	W10 x 26					
	12	2' (3')	11'6" (10')	33'6" (32')	W10 x 39	W12 x 26					
	14	2' (3')	12'6" (10'6")	36'6" (34'6")	W10 x 45	$W12 \times 30$					
	16	2' (3')	14' (11'6")	40' (37'6")	W10 x 49	W14 x 34					
	18	2' (3')	15'6" (12')	43'6" (40')	W10 x 60	$W16 \times 36$					
	20	2' (3')	16'6" (13')	46'6" (43')	W12 x 65	W16 x 40					
	22	2' (3')	18' (14')	50' (46')	W12 x 72	W21 x 44					
	25	2' (3')	20' (15'6")	55' (50'6")	W12 x 79	W18 x 50					
	30	3' (4')	18' (15')	58' (55')	W24 x 104	W21 x 55					
	35	3' (4')	21'6" (18')	66'6" (63')	W14 x 132	W24 x 68					
	40	3' (4')	24' (20')	74' (70')	W14 x 159	W24 x 84					

### Exposure C 36 FEET WIDE INSTALLATIONS

Colum	Column and Pier Requirements (Based on ASCE 7-05 Exposure C for 90mph Wind Load)								
Display Height	Pier Dia	Pier Depth	Col Length	Unbraced Column	Braced Column *				
8	2'	10'6"	28'6"	W12 x 30	W14 x 22				
3 10	2'	11'6"	31'6"	W14 x 38	W12 x 26				
12	2' (3')	12'6" (11')	34'6" (33')	W14 x 43	W12 x 30				
14	2' (3')	14' (11'6")	38' (35'6")	W10 x 49	W14 x 34				
16	2' (3')	15'6" (12')	41'6" (38')	W12 x 53	W16 x 36				
18	2' (3')	17' (13'6")	45' (41'6")	W14 x 61	W16 x 40				
20	2' (3')	19' (14'6")	49' (44'6")	W12 x 72	W14 x 48				
22	3' (4')	16' (13'6")	48' (45'6")	W12 x 79	W18 x 50				
25	3' (4')	17'6" (14'6")	52'6" (49'6")	W12 x 96	W21 x 55				
30	3' (4')	20'6" (17')	60'6" (57')	W14 x 109	W21 x 68				
35	3' (4')	23' (19'6")	68' (64'6")	W14 x 145	W24 x 76				
40	3' (4')	27'6" (23')	77'6" (73')	W14 x 176	W24 x 94				

### 90 MPH WIND ZONES

### Exposure B 30 FEET WIDE INSTALLATIONS

	Column and Pier Requirements (Based on ASCE 7-05)								
Display Height	Pier Dia	Pier Depth	Col Length	Unbraced Column	Braced Column				
10	2' (3')	9' (7'6")	29' (27'6")	W12 x 26	W8 x 21				
12	2' (3')	9'6" (8'6")	31'6" (30'6")	W10 x 33	W10 x 22				
14	2' (3')	10'6" (9')	34'6" (33')	W10 x 33	W14 x 22				
16	2' (3')	11' (9'6")	37' (35'6")	W10 x 39	W12 x 26				
18	2' (3')	11'6" (10')	39'6" (38')	W10 x 45	W12 x 30				
20	2' (3')	12'6" (10'6")	42'6" (40'6")	W10 x 49	W12 x 30				
22	2' (3')	13'6" (11')	45'6" (43')	W12 x 53	W14 x 34				
25	2' (3')	15' (12')	50' (47')	W12 x 65	W16 x 36				
30	2' (3')	17' (13'6")	57' (53'6")	W12 x 79	W21 x 44				
35	3' (4')	16' (13'6")	61' (58'6")	W12 x 106	W18 x 55				
40	3' (4')	18' (15'6")	68' (65'6")	W12 x 120	W21 x 62				

### Exposure B 32 FEET WIDE INSTALLATIONS

Column and Pier Requirements (Based on ASCE 7-05 Exposure B for 90mph Wind Load)								
Display Height	Pier Dia.	Pier Depth	Col. Len.	Unbraced Column	Braced Column *			
8	2' (3')	8'6" (7'6")	26'6" (25'6")	W8 x 24	W8 x 18			
10	2' (3')	9'6" (8')	29'6" (28')	W8 x 28	W8 x 21			
12	2' (3')	10' (8'6")	32' (30'6")	W10 x 33	W10 x 22			
14	2' (3')	11' (9'6")	35' (33'6")	W10 x 39	W10 x 26			
16	2' (3')	11'6" (10')	37'6" (36')	W14 x 43	W12 x 26			
18	2' (3')	12'6" (10'6")	40'6" (38'6")	W10 x 49	$W12 \times 30$			
20	2' (3')	13'6" (11')	43'6" (41')	W12 x 53	W14 x 34			
22	2' (3')	14'6" (11'6")	46'6" (43'6")	W10 x 60	W18 x 35			
25	2' (3')	16' (12'6")	51' (47'6")	W12 x 65	W16 x 40			
30	3' (4')	14'6" (12'6")	54'6" (52'6")	W12 x 87	W16 x 50			
35	3' (4')	17'6" (14'6")	62'6" (59'6")	W12 x 106	W21 x 55			
40	3' (4')	19'6" (16'6")	69'6" (66'6")	W14 x 120	W21 x 68			

## Exposure B 36 FEET WIDE INSTALLATIONS

Colum	n and Pier Require	ments (Based on A	SCE 7-05 Exposure	e B for 90mph Wind	d Load)	
Display Height	Pier Dia	Pier Depth	Col Len	Unbraced Colum	Braced Column *	
8	2'	9'	27'	W8 x 24	W8 x 21	
10	2'	10'	30'	W10 x 33	W10 x 22	Ь
12	2' (3')	11' (9'6")	33' (31'6")	W10 x 33	W10 x 26	В
14	2' (3')	11'6" (10')	35'6" (34')	W10 x 39	W12 x 26	
16	2' (3')	12'6" (10'6")	38'6" (36'6")	W14 x 48	W12 x 30	
18	2' (3')	13'6" (11'6")	41'6" (39'6")	W12 x 53	W14 x 34	
20	2' (3')	15' (12')	45' (42')	W10 x 60	W16 x 36	
22	3' (4')	12'6" (11'6")	44'6" (43'6")	W12 x 65	W16 x 40	
25	3' (4')	14' (12')	49' (47')	W12 x 72	W21 x 44	
30	3' (4')	16'6" (14')	56'6" (54')	W12 x 96	W18 x 55	
35	3' (4')	19' (16')	64' (61')	W14 x 109	W21 x 62	ĺ
40	3' (4')	22' (18'6")	72' (68'6")	W14 x 145	W24 x 76	ĺ

#### **Chart Notes:**

- 1. \* Requires that braces be placed every 10' interval from ground level that spans all columns. See detail on sheet 5.
- 2. 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.
- 3. 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
4 Column
Multi-Section



Nevco, Inc. Greenville, Illinois 62246

Drawing No. 241-0365

Drawn WHP Date 12/14/18 Sheet of 2 7

3

#### В

### 130 MPH WIND ZONES

### Exposure C 30 FEET WIDE INSTALLATIONS

D	Column and Pier Requirements (Based on ASCE 7-05)									
	Display Height	Pier Dia	Pier Depth	Col Length	Unbraced Colu	Braced Column *				
	10	2' (3')	14'6" (11'6")	34'6" (31'6")	W14 x 43	W14 x 34				
	12	2' (3')	16'6" (13')	38'6" (35')	W12 x 53	W16 x 36				
	14	2' (3')	18'6" (14'6")	42'6" (38'6")	W14 x 61	W21 x 44				
	16	2' (3')	21' (16')	47' (42')	W16 x 67	W16 x 50				
	18	2' (3')	23' (17'6")	51' (45'6")	W18 x 76	W18 x 55				
	20	2' (3')	24'6" (19')	54'6" (49')	W12 x 96	W21 x 55				
	22	3' (4')	20'6" (17')	52'6" (49')	W21 x 101	W21 x 62				
	25	3' (4')	22'6" (19')	57'6" (54')	W24 x 117	W24 x 68				
	30	3' (4')	26'6" (22')	66'6" (62')	W14 x 145	W24 x 84				
	35	3' (4')	31'6" (26')	76'6" (71')	W18 x 192	W24 x 104				
	40	3' (4')	35'6" (29'6")	85'6" (79'6")	W14 x 233	W24 x 131				

## Exposure B 30 FEET WIDE INSTALLATIONS

	Column and Pier Requirements (Based on ASCE 7-05)								
Display Height	Pier Dia	Pier Depth	Col Length	Unbraced Column	Braced Column *				
10	2' (3')	11'6" (10')	31'6" (30')	W10 x 39	W12 x 26				
12	2' (3')	13' (11')	35' (33')	W14 x 43	W12 x 30				
14	2' (3')	14'6" (11'6")	38'6" (35'6")	W10 x 49	W14 x 34				
16	2' (3')	16'6" (12'6")	42'6" (38'6")	W10 x 60	W16 x 40				
18	2' (3')	18' (14')	46' (42')	W12 x 65	W21 x 44				
20	2' (3')	19'6" (15')	49'6" (45')	W12 x 72	W16 x 50				
22	3' (4')	16'6" (13'6")	48'6" (45'6")	W12 x 79	W18 x 50				
25	3' (4')	18' (15')	53' (50')	W12 x 96	W21 x 55	$\vdash$			
30	3' (4')	21' (17'6")	61' (57'6")	W14 x 120	W21 x 68				
35	3' (4')	25'6" (21')	70'6" (66')	W18 x 158	W24 x 84				
40	3' (4')	28'6" (24')	78'6" (74')	W18 x 192	W21 x 101				

### Exposure C 32 FEET WIDE INSTALLATIONS

Cl								
٦		Column and Pier Requirements (Based on ASCE 7-05)						
	Display Height	Pier Dia	Pier Depth	Col Length	Unbraced Column	Braced Column *		
ı	8	2' (3')	13'6" (11')	31'6" (29')	W12 x 40	W14 x 30		
	10	2' (3')	15'6" (12')	35'6" (32')	W14 x 48	W18 x 35		
	12	2' (3')	18' (14')	40' (36')	W10 x 60	W16 x 40		
	14	2' (3')	20' (15'6")	44' (39'6")	W12 x 65	W14 x 48		
	16	2' (3')	22' (17')	48' (43')	W14 x 74	W18 x 50		
ĺ	18	2' (3')	25' (19')	53' (47')	W18 x 86	W21 x 55		
	20	2' (3')	27' (20'6")	57' (50'6")	W18 x 97	W21 x 62		
1	22	3' (4')	22' (18'6")	54' (50'6")	W21 x 101	W21 x 68		
	25	3' (4')	24'6" (20'6")	59'6" (55'6")	W18 x 130	$W24 \times 76$		
	30	3' (4')	28'6" (23'6")	68'6" (63'6")	W14 x 159	W24 x 94		
	35	3' (4')	34'6" (28'6")	79'6" (73'6")	W21 x 201	W24 x 117		
	40	3' (4')	39' (32')	89' (82')	W14 x 257	W24 x 146		
- 1		·	·	·				

#### Exposure B 32 FEET WIDE INSTALLATIONS

		ed on ASCE 7-05)	Requirements (Base	lumn and Pier	Co	
1	Braced Column *	Unbraced Column	Col. Len.	Pier Depth	Pier Dia.	Display Height
	W10 x 26	W10 x 33	29' (27'6")	11' (9'6")	2' (3')	8
	W12 x 30	W10 x 39	32'6" (30'6")	12'6" (10'6")	2' (3')	10
	W14 x 34	W12 x 45	36' (33'6")	14' (11'6")	2' (3')	12
	W16 x 36	W12 x 53	39'6" (36')	15'6" (12')	2' (3')	14
	W16 x 40	W14 x 61	43'6" (39'6")	17'6" (13'6")	2' (3')	16
	W16 x 50	W14 x 68	47'6" (43')	19'6" (15')	2' (3')	18
7,	W18 x 50	W18 x 76	51' (46'6")	21' (16'6")	2' (3')	20
_	W21 x 55	W12 x 87	49'6" (46'6")	17'6" (14'6")	3' (4')	22
	W21 x 62	W21 x 101	54'6" (51'6")	19'6" (16'6")	3' (4')	25
	W18 x 76	W24 x 131	63' (59')	23' (19')	3' (4')	30
	W24 x 94	W18 x 175	72'6" (68')	27'6" (23')	3' (4')	35
	W24 x 104	W21 x 201	81' (76')	31' (26')	3' (4')	40

#### Exposure C 36 FEET WIDE INSTALLATIONS

В	Column and Pier Requirements (Based on ASCE 7-05)							
	Display Height	Pier Dia	Pier Depth	Col Length	Unbraced Column	Braced Column *		
	8	2' (3')	15'6" (12')	33'6" (30')	W14 x 43	W14 x 34		
	10	3' (4')	13'6" (12')	33'6" (32')	W12 x 53	W16 x 40		
	12	3' (4')	15'6" (13')	37'6" (35')	W14 x 61	W14 x 48		
	14	3' (4')	17'6" (14'6")	41'6" (38'6")	W12 x 72	W18 x 55		
	16	3' (4')	19'6" (16')	45'6" (42')	W18 x 86	W21 x 55		
	18	3' (4')	21'6" (17'6")	49'6" (45'6")	W18 x 97	W21 x 62		
	20	3' (4')	23'6" (19'6")	53'6" (49'6")	W21 x 101	W24 x 68		
$\dashv$	22	3' (4')	25'6" (21')	57'6" (53')	W24 x 117	W24 x 76		
	25	3' (4')	28' (23'6")	63' (58'6")	W18 x 143	W24 x 94		
	30	3' (4')	33' (27')	73' (67')	$W24 \times 176$	W24 x 104		
	35	3' (4')	37'6" (31')	82'6" (76')	W14 x 233	W24 x 131		
	40	3' (4')	44'6" (36'6")	94'6" (86'6")	W18 x 283	W24 x 176		

#### Exposure B 36 FEET WIDE INSTALLATIONS

	Column and Pier Requirements (Based on ASCE 7-05)						
Display Height	Pier Dia	Pier Depth	Col Len	Unbraced Colum	Braced Column *		
8	2' (3')	12' (10'6")	30' (28'6")	W16 x 36	W12 x 26		
10	3' (4')	11'6" (10')	31'6" (30')	W14 x 43	W14 x 30		
12	3' (4')	12'6" (11')	34'6" (33')	W12 x 53	W16 x 36		
14	3' (4')	14' (12')	38' (36')	W14 x 61	W16 x 40		
16	3' (4')	15'6" (13')	41'6" (39')	W12 x 65	W16 x 50		
18	3' (4')	17' (14')	45' (42')	W18 x 76	W18 x 50		
20	3' (4')	18'6" (15'6")	48'6" (45'6")	W18 x 86	W21 x 55		
22	3' (4')	20' (16'6")	52' (48'6")	W16 x 100	W21 x 62		
25	3' (4')	22'6" (18'6")	57'6" (53'6")	W14 x 109	W24 x 68		
30	3' (4')	26' (21'6")	66' (61'6")	W14 x 145	W24 x 84		
35	3' (4')	30' (25')	75' (70')	W14 x 176	W21 x 101		
40	3' (4')	35'6" (29'6")	85'6" (79'6")	$W14 \times 233$	W24 x 131		

#### **Chart Notes:**

- 1. \* Requires that braces be placed every 10' interval from ground level that spans all columns. See detail on sheet 5.
- 2. 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.
- 3. 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 4 Column Multi-Section



Nevco, Inc. Greenville, Illinois 62246

Drawing No. 241-0365

Drawn Sheet 3 of 7 12/14/18 WHP

<u>本</u>

В

### Exposure C 30 FEET WIDE INSTALLATIONS

### 150 MPH WIND ZONES

## Exposure B 30 FEET WIDE INSTALLATIONS

	SUFEET WIDE INSTALLATIONS						
Column and Pier Requirements (Based on ASCE 7-05)							
	Display Height	Pier Dia	Pier Depth	Col Length	Unbraced Column	Braced Column	
D	10	2' (3')	17'6" (13'6")	37'6" (33'6")	W12 x 53	$W14 \times 30$	
	12	3' (4')	15'6" (13')	37'6" (35')	W14 x 61	W18 x 35	
	14	3' (4')	17' (14'6")	41' (38'6")	W16 x 67	W16 x 40	
	16	3' (4')	19'6" (16')	45'6" (42')	W18 x 86	W16 x 50	
	18	3' (4')	21' (17'6")	49' (45'6")	W18 x 97	W18 x 50	
	20	3' (4')	23' (19')	53' (49')	W21 x 101	W21 x 55	
	22	3' (4')	24'6" (20'6")	56'6" (52'6")	W24 x 117	W21 x 62	
	25	3' (4')	27'6" (22'6")	62'6" (57'6")	W18 x 143	W21 x 68	
	30	3' (4')	32' (26'6")	72' (66'6")	W14 x 176	W24 x 84	
	35	3' (4')	38'6" (31'6")	83'6" (76'6")	W14 x 233	W24 x 104	
	40	3' (4')	43'6" (35'6")	93'6" (85'6")	W14 x 283	W24 x 117	

Column and Pier Requirements (Based on ASCE 7-05)					
Display Height	Pier Dia	Pier Depth	Col Length	Unbraced Column	Braced Column
10	2' (3')	13'6" (11')	33'6" (31')	W12 x 40	W16 x 40
12	3' (4')	12' (11')	34' (33')	W10 x 49	W21 x 44
14	3' (4')	13'6" (11'6")	37'6" (35'6")	W10 x 60	W18 x 50
16	3' (4')	15' (12'6")	41' (38'6")	W12 x 65	W21 x 55
18	3' (4')	16'6" (14')	44'6" (42')	W18 x 76	W21 x 62
20	3' (4')	18' (15')	48' (45')	W18 x 86	W24 x 68
22	3' (4')	19'6" (16'6")	51'6" (48'6")	W18 x 97	W24 x 76
25	3' (4')	21'6" (18')	56'6" (53')	W14 x 109	W24 x 84
30	3' (4')	25'6" (21')	65'6" (61')	W14 x 145	W24 x 104
35	3' (4')	30'6" (25'6")	75'6" (70'6")	W21 x 182	W24 x 131
40	3' (4')	34'6" (28'6")	84'6" (78'6")	W14 x 233	W24 x 162

#### Exposure C 32 FEET WIDE INSTALLATIONS

#### Exposure B 32 FEET WIDE INSTALLATIONS

c-	Column and Pier Requirements (Based on ASCE 7-05)					
	Display Height	Pier Dia	Pier Depth	Col Length	Unbraced Column	Braced Column *
	8	2' (3')	16'6" (12'6")	34'6" (30'6")	W14 x 48	W18 x 35
	10	2' (3')	19' (14'6")	39' (34'6")	W10 x 60	W14 x 43
	12	2' (3')	21'6" (16'6")	43'6" (38'6")	W12 x 65	W16 x 50
	14	2' (3')	24'6" (18'6")	48'6" (42'6")	$W18 \times 76$	W18 x 55
	16	2' (3')	27' (20'6")	53' (46'6")	W18 x 86	W21 x 62
	18	3' (4')	23' (19')	51' (47')	W21 x 101	W21 x 68
	20	3' (4')	25' (20'6")	55' (50'6")	W24 x 104	W24 x 76
	22	3' (4')	27' (22')	59' (54')	W21 x 122	W24 x 84
H	25	3' (4')	30' (24'6")	65' (59'6")	W24 x 146	W24 x 94
	30	3' (4')	34'6" (28'6")	74'6" (68'6")	W21 x 182	W24 x 117
	35	3' (4')	42' (34'6")	87' (79'6")	$W14 \times 257$	W24 x 146
	40	3' (4')	47'6" (38'6")	97'6" (88'6")	W14 x 311	W24 x 192

	Co	olumn and Pier	Requirements (Base	ed on ASCE 7-05)	
Display Height	Pier Dia.	Pier Depth	Col. Len.	Unbraced Column	Braced Column *
8	2' (3')	12'6" (10'6")	30'6" (28'6")	W10 x 39	W12 x 30
10	2' (3')	14'6" (11'6")	34'6" (31'6")	W14 x 43	W14 x 34
12	2' (3')	17' (13')	39' (35')	W12 x 53	W16 x 40
14	2' (3')	19' (14'6")	43' (38'6")	W14 x 61	W21 x 44
16	2' (3')	21' (16')	47' (42')	W16 x 67	W18 x 50
18	3' (4')	18' (15')	46' (43')	W18 x 86	W18 x 55
20	3' (4')	19'6" (16')	49'6" (46')	W12 x 96	W21 x 62
22	3' (4')	21' (17'6")	53' (49'6")	W21 x 101	W21 x 68
25	3' (4')	23'6" (19'6")	58'6" (54'6")	W24 x 117	W24 x 68
30	3' (4')	27'6" (23')	67'6" (63')	W18 x 158	W24 x 94
35	3' (4')	33' (27'6")	78' (72'6")	W21 x 201	W24 x 117
40	3' (4')	37'6" (31')	87'6" (81')	W14 x 257	W24 x 131

# Exposure C 36 FEET WIDE INSTALLATIONS

#### Exposure B 36 FEET WIDE INSTALLATIONS

	Column and Pier Requirements (Based on ASCE 7-05)					
	Display Height	Pier Dia	Pier Depth	Col Length	Unbraced Column	Braced Column *
В	8	2' (3')	18'6" (14')	36'6" (32')	W12 x 53	W16 x 40
	10	3' (4')	16'6" (13'6")	36'6" (33'6")	W14 x 61	W16 x 50
	12	3' (4')	19' (15'6")	41' (37'6")	W14 x 74	W18 x 55
	14	3' (4')	21' (17'6")	45' (41'6")	W18 x 86	W21 x 62
	16	3' (4')	23'6" (19'6")	49'6" (45'6")	W18 x 97	W21 x 68
	18	3' (4')	26' (21')	54' (49')	W21 x 101	W24 x 76
	20	3' (4')	28'6" (23'6")	58'6" (53'6")	W24 x 117	W24 x 84
	22	3' (4')	31' (25'6")	63' (57'6")	W24 x 146	W24 x 94
	25	3' (4')	34'6" (28')	69'6" (63')	W24 x 162	W24 x 104
	30	3' (4')	40' (33')	80' (73')	W24 x 207	W24 x 131
	35	3' (4')	46' (37'6")	91' (82'6")	W18 x 283	W24 x 176
	40	3' (4')	55' (44'6")	105' (94'6")	W14 x 370	W18 x 283

	Column and Pier Requirements (Based on ASCE 7-05)					
Display Height	Pier Dia	Pier Depth	Col Len	Unbraced Colum	Braced Column *	
8	2' (3')	14'6" (11'6")	32'6" (29'6")	W12 x 40	W14 x 34	
10	3' (4')	13' (11'6")	33' (31'6")	W12 x 53	W16 x 36	
12	3' (4')	14'6" (12'6")	36'6" (34'6")	W14 x 61	W21 x 44	
14	3' (4')	16'6" (14')	40'6" (38')	W16 x 67	W18 x 50	
16	3' (4')	18'6" (15')	44'6" (41')	W18 x 76	W18 x 55	
18	3' (4')	20' (16'6")	48' (44'6")	W18 x 86	W21 x 62	
20	3' (4')	22'6" (18'6")	52'6" (48'6")	W21 x 101	W21 x 68	
22	3' (4')	24' (20')	56' (52')	W21 x 111	W18 x 76	
25	3' (4')	27' (22'6")	62' (57'6")	W24 x 131	W24 x 84	
30	3' (4')	31'6" (26')	71'6" (66')	W18 x 175	W24 x 104	
35	3' (4')	36'6" (30')	81'6" (75')	W14 x 233	W24 x 131	
40	3' (4')	43'6" (35'6")	93'6" (85'6")	W14 x 283	W24 x 162	

#### **Chart Notes:**

- 1. \* Requires that braces be placed every 10' interval from ground level that spans all columns. See detail on sheet 5.
- 2. 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.
- 3. 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 4 Column Multi-Section

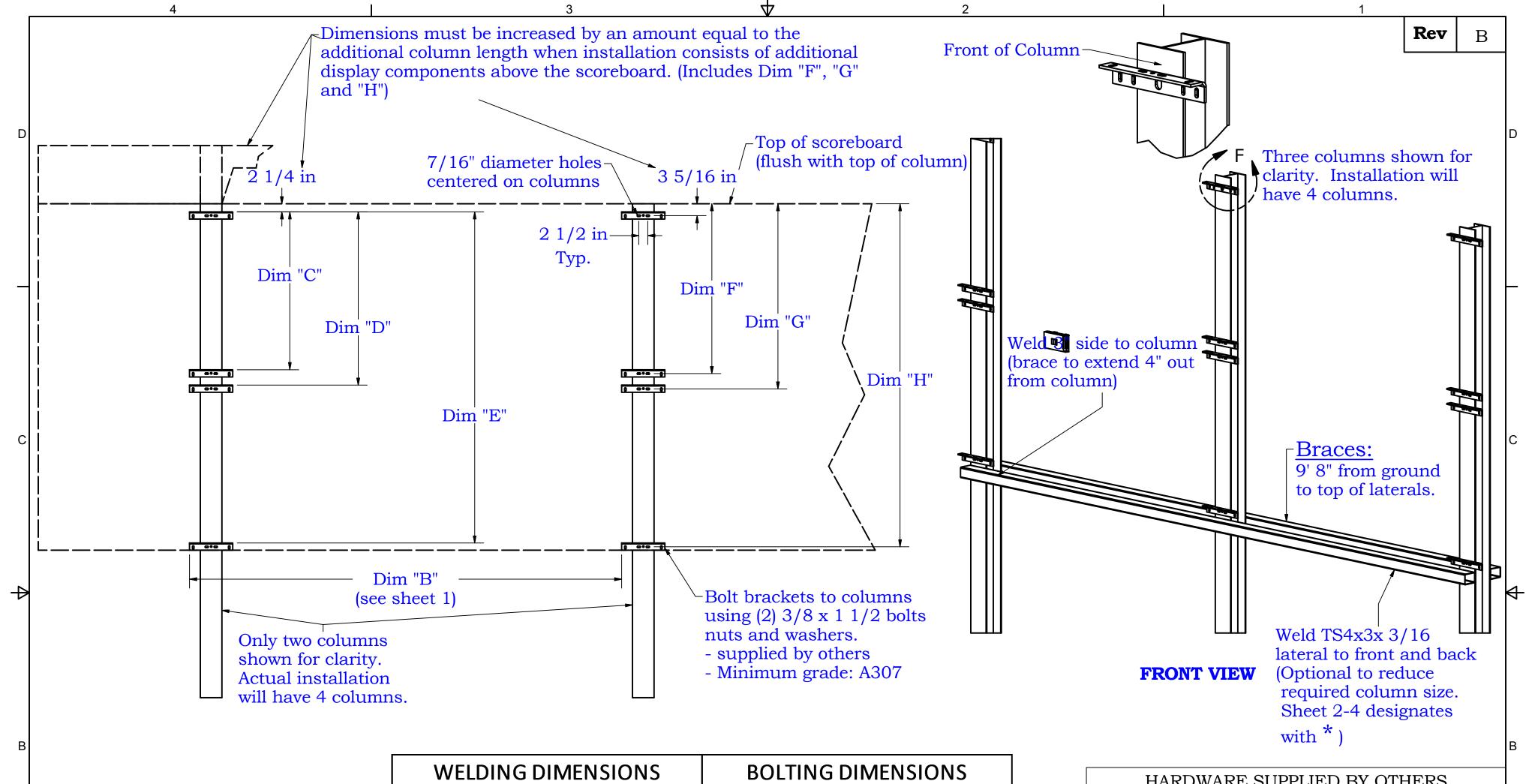


Nevco, Inc. Greenville, Illinois 62246

Drawing No. 241-0365 Drawn Sheet 4 of 7

12/14/18

WHP 4



	WELDING DIMENSIONS			BOLTING DIMENSIONS		
Model #	Dim "C"	Dim "D"	* Dim "E"	Dim "F"	Dim "G"	Dim "H"
1603, 1603PC	43 7/8"	48 1/8"	103 15/16"	47 5/32"	51 7/16"	107 1/4"
3620, 7620 3688, 7688	43 7/8"	48 1/8"	91 15/16"	47 5/32"	51 7/16"	95 1/4"
3604, 3616 3657, 7616	55 7/8"	60 1/8"	115 15/16"	59 5/32"	63 7/16"	119 1/4"

Required Hand Tools:

- 1. Phillips head screw driver/drill with phillips driver.
- 2. 9/16" wrench
- 3. Ratchet wrench and 9/16" socket
- 4. Level
- 5. Tape measure

#### Notes:

- 1) If welding brackets to columns, weld around full contact surface of brackets.
- 2) **FOR HIGH WIND AREAS**: For installations in wind zones higher than 150 mph, brackets <u>must</u> be welded to columns.
- 3) Dimensions above should be taken from the top of the SHORTEST column, marked and leveled across to other column.
- 4) Brackets shipped in separate container.

HARDWARE SUPPLIED BY OTHERS			
Description	Quantity		
3/8 x 1 1/2 Bolt	32		
3/8 Flat Washer	64		
3/8 Lock Washer	32		
3/8 Nut	32		
3/8-16 eye bolts (see sheet 6)	2		

Outdoor Scoreboard
Installation
4 Column
Multi-Section

Nevco, Inc.
Greenville, Illinois 62246

Drawing No.
241-0365

Drawn
WHP

Date
12/14/18

Sheet 5 of 7

**4** 3 **4** 2

