

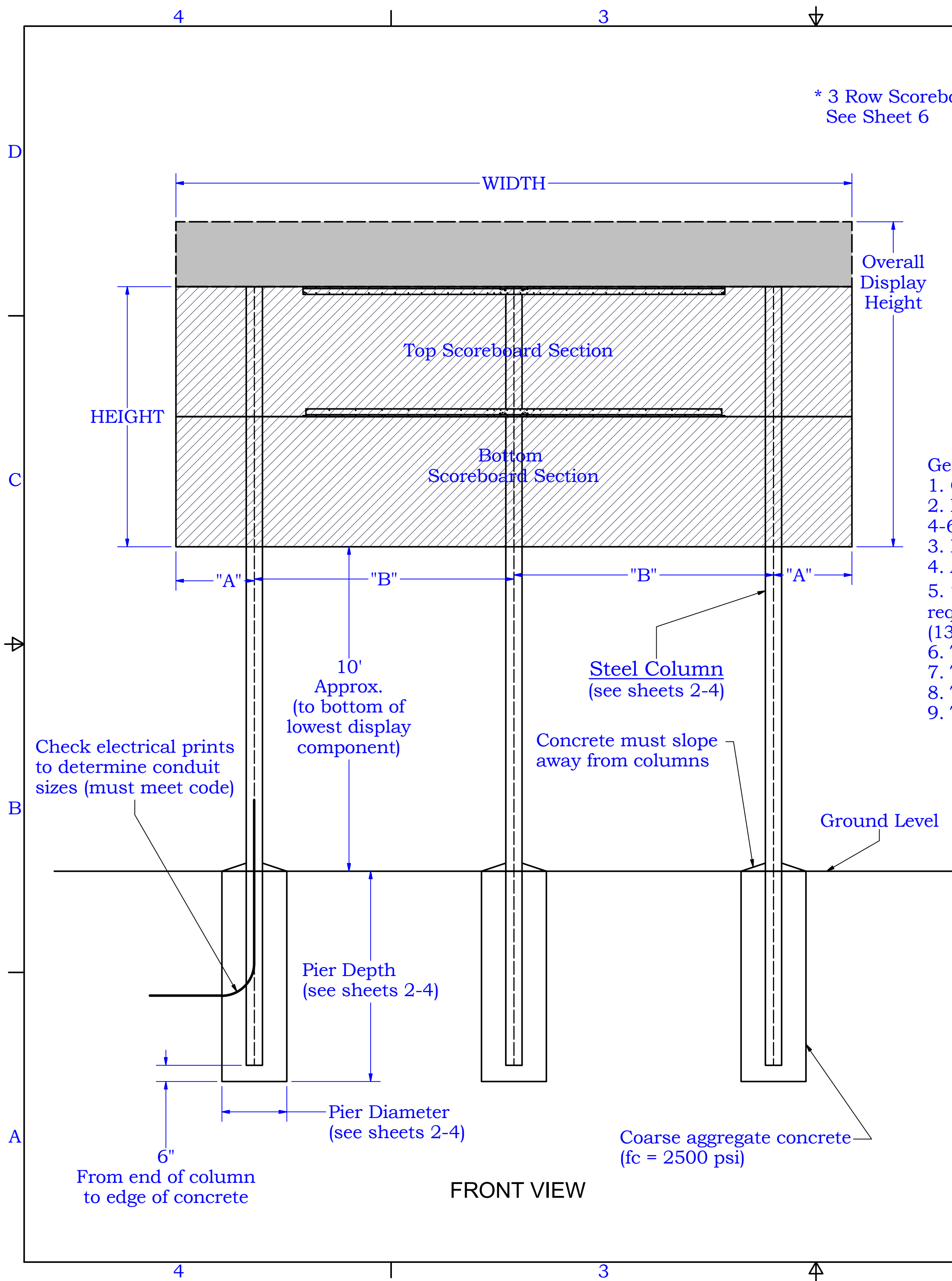
DIMENSIONS AND SPECIFICATIONS						
Model	WIDTH	HEIGHT	WEIGHT	WEIGHT w/ETN	DIM "A"	DIM "B"
1604 1604PC	28'	8' 3/16"	650	712	4'	10'
1606 1606PC						
3615 3617 3618 3619 7630 7631 7632	24'	8' 3/16"	570	632	4'	8'
3685	24'	8' 3/16"	N/A	740	4'	8'
7605* 7615* 7625*	24'	10' 6 9/32"	730	792	4'	8'
7685	24'	8' 3/16"	N/A	740	4'	8'
3621	20'	8' 3/16"	520	582	1'	9'
3682	20'	8' 3/16"	N/A	690	1'	9'


**General Notes:**

1. Column steel to be grade A992 (50 ksi steel minimum).
2. Bracing steel to be ASTM A500 Grade B minimum (see note 1 on sheets 4-6).
3. Minimum bolt grade: A307
4. All welds to conform to AWS standards
5. The dimensions in the charts on sheets 4-6 are calculated using the requirements specified in IBC 2009, and the Manual of Steel Construction (13th Edition). Soil lateral bearing pressure is considered to be 150 psf/f.
6. The weights of signs to be calculated using 4.3 lb/sq. ft of sign area.
7. The weights of Nevco message centers to be calculated using 8.5 lb/sq ft.
8. The weights of Nevco video displays to be calculated using 9.5 lbs/sq. ft.
9. 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 Installation 3 Column Multi-Section		 <b>Nevco, Inc.</b> Greenville, Illinois 62246
Drawn DBB	Date 12/14/18	Sheet 1 of 8

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### Exposure C

20 FEET WIDE INSTALLATIONS

## 90 MPH WIND ZONES

### Exposure B

20 FEET WIDE INSTALLATIONS

Rev B

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' (3')	8'6" (7'6")	25'6" (24'6")	W8 x 24	W8 x 18
10	2' (3')	9'6" (8')	28'6" (27')	W8 x 28	W8 x 21
12	2' (3')	10' (9')	31' (30')	W10 x 33	W10 x 22
14	2' (3')	11' (9'6")	34' (32'6")	W10 x 39	W10 x 26
16	2' (3')	11'6" (10')	36'6" (35')	W14 x 43	W12 x 26
18	2' (3')	12' (10'6")	39' (37'6")	W8 x 48	W12 x 30
20	2' (3')	13' (11')	42' (40')	W10 x 49	W14 x 34
22	2' (3')	14'6" (11'6")	45'6" (42'6")	W10 x 60	W18 x 35
25	3' (4')	12'6" (11')	46'6" (45')	W12 x 65	W16 x 40
30	3' (4')	14'6" (12'6")	53'6" (51'6")	W12 x 87	W16 x 50
35	3' (4')	16'6" (14')	60'6" (58')	W12 x 106	W21 x 55
40	3' (4')	19' (16')	68' (65')	W14 x 120	W21 x 62

Column and Pier Requirements (Based on ASCE 7-05 Exposure B for 90mph Wind Load)

Display Height	Pier Dia	Pier Depth	Col. Length	Unbraced Column	Braced Column *
8	2' (3')	7'6" (6'6")	24'6" (23'6")	W8 x 21	W8 x 15
10	2' (3')	8' (7')	27' (26')	W8 x 24	W8 x 18
12	2' (3')	9' (7'6")	30' (28'6")	W8 x 28	W8 x 21
14	2' (3')	9'6" (8')	32'6" (31')	W10 x 33	W10 x 22
16	2' (3')	10' (8'6")	35' (33'6")	W8 x 35	W10 x 22
18	2' (3')	10'6" (9')	37'6" (36')	W10 x 39	W10 x 26
20	2' (3')	11' (9'6")	40' (38'6")	W10 x 45	W12 x 26
22	2' (3')	12' (10'6")	43' (41'6")	W10 x 49	W12 x 30
25	3' (4')	11' (10')	45' (44')	W10 x 60	W14 x 34
30	3' (4')	12' (11')	51' (50')	W12 x 72	W16 x 40
35	3' (4')	13'6" (12')	57'6" (56')	W12 x 87	W14 x 48
40	3' (4')	15'6" (13')	64'6" (62')	W12 x 106	W18 x 55

### Exposure C

24 FEET WIDE INSTALLATIONS

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' (3')	9' 6" [8' 6"]	27' [26']	W12 x 26	W8 x 21
10'	2' (3')	10' 6" [9']	30' [28' 6"]	W10 x 33	W14 x 22
12'	2' (3')	11' 6" [10']	33' [31' 6"]	W10 x 39	W12 x 26
14'	2' (3')	12' [10' 6"]	36' [33' 6"]	W14 x 43	W12 x 30
16'	2' (3')	13' 6" [11']	39' [36' 6"]	W10 x 49	W14 x 34
18'	2' (3')	14' 6" [12']	42' [39' 6"]	W12 x 53	W18 x 35
20'	2' (3')	16' [12' 6"]	45' 6" [42']	W14 x 61	W16 x 40
22'	2' (3')	14' (11')	46' (43')	W12 x 65	W14 x 43
25'	3' (4')	12'6" (10'6")	47'6" (45'6")	W12 x 79	W18 x 50
30'	3' (4')	14'6" (12'6")	54'6" (52'6")	W24 x 104	W21 x 55
35'	3' (4')	16'6" (14')	61'6" (59')	W14 x 120	W21 x 68
40'	3' (4')	19' (16')	69' (66')	W14 x 145	W24 x 76

### Exposure B

24 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']	26' [24' 6"]	W8 x 24	W8 x 18
10'	2' (3')	9' [8']	28' 6" [27' 6"]	W12 x 26	W8 x 21
12'	2' (3')	10' [8' 6"]	31' 6" [30']	W10 x 33	W10 x 22
14'	2' (3')	10' 6" [9']	34' [32' 6"]	W8 x 35	W10 x 26
16'	2' (3')	11' [9' 6"]	36' 6" [35']	W14 x 43	W12 x 26
18'	2' (3')	12' [10' 6"]	39' 6" [38']	W14 x 48	W12 x 30
20'	2' (3')	13' [11']	42' 6" [40' 6"]	W10 x 49	W14 x 30
22'	2' (3')	14' (11')	46' (43')	W10 x 60	W14 x 34
25'	3' (4')	12'6" (10'6")	47'6" (45'6")	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')	16'6" (14')	61'6" (59')	W12 x 106	W21 x 55
40'	3' (4')	19' (16')	69' (66')	W14 x 120	W21 x 62

### Exposure C

28 FEET WIDE INSTALLATIONS

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' (3')	10' (8'6")	27'6" (26')	W8 x 28	W10 x 22
10	2' (3')	11' (9'6")	30'6" (29')	W10 x 33	W10 x 26
12	2' (3')	12' (10')	33'6" (31'6")	W10 x 39	W12 x 26
14	2' (3')	13' (11')	36'6" (34'6")	W10 x 45	W14 x 30
16	2' (3')	14'6" (11'6")	40' (37')	W12 x 53	W14 x 34
18	2' (3')	16' (12'6")	43'6" (40')	W10 x 60	W16 x 40
20	2' (3')	17' (13'6")	46'6" (43')	W12 x 65	W14 x 43
22	2' (3')	18'6" (14'6")	50'6" (46'6")	W12 x 72	W14 x 48
25	3' (4')	16' (13'6")	51' (48'6")	W12 x 87	W18 x 50
30	3' (4')	19'6" (16'6")	59'6" (56'6")	W14 x 109	W21 x 62
35	3' (4')	22' (18'6")	67' (63'6")	W14 x 132	W24 x 68
40	3' (4')	25' (21')	75' (71')	W14 x 159	W24 x 84

### Exposure B

28 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 Length	Unbraced Column	Braced Column *
8	2' (3')	8'6" (7'6")	26' (25')	W8 x 24	W8 x 18
10	2' (3')	9'6" (8')	29' (27'6")	W8 x 28	W8 x 21
12	2' (3')	10'6" (9')	32' (30'6")	W10 x 33	W14 x 22
14	2' (3')	11' (9'6")	34'6" (33')	W10 x 39	W10 x 26
16	2' (3')	12' (10')	37'6" (35'6")	W10 x 45	W12 x 30
18	2' (3')	12'6" (11')	40' (38'6")	W10 x 49	W14 x 30
20	2' (3')	14' (11'6")	43'6" (41')	W12 x 53	W14 x 34
22	2' (3')	15' (11'6")	47' (43'6")	W10 x 60	W16 x 36
25	3' (4')	13' (11')	48' (46')	W12 x 72	W16 x 40
30	3' (4')	15'6" (13')	55'6" (53')	W12 x 96	W18 x 55
35	3' (4')	18' (15')	63' (60')	W14 x 109	W21 x 62
40	3' (4')	20'6" (17')	70'6" (67')	W14 x 132	W21 x 68

#### Chart Notes:

- \* Requires that braces be placed approximately 10' from ground level that spans both columns. See detail on sheet 5. If display height is taller than 10', braces must be installed at each 10' increment in display height.
- 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  
Installation  
3 Column  
Multi-Section



Nevco, Inc.  
Greenville, Illinois 62246

Drawing No. 241-0358

Drawn DBB Date 12/14/18

Sheet 2 of 8

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### Exposure C

#### 20 FEET WIDE INSTALLATIONS

## 130 MPH WIND ZONES

### Exposure B

#### 20 FEET WIDE INSTALLATIONS

Rev B

Column and Pier Requirements (Based on ASCE 7-05 Exposure C for 130mph Wind Load)

Display Height	Pier Dia	Pier Depth	Col. Length	Unbraced Column	Braced Column *
8	2' (3')	11'6" (9'6")	28'6" (26'6")	W10 x 33	W10 x 26
10	2' (3')	12'6" (10'6")	31'6" (29'6")	W10 x 39	W12 x 30
12	2' (3')	14' (11'6")	35' (32'6")	W14 x 48	W14 x 34
14	2' (3')	16' (12'6")	39' (35'6")	W12 x 53	W16 x 36
16	2' (3')	17'6" (13'6")	42'6" (38'6")	W14 x 61	W16 x 40
18	2' (3')	19' (14'6")	46' (41'6")	W12 x 65	W21 x 44
20	2' (3')	20'6" (16')	49'6" (45')	W18 x 76	W18 x 50
22	2' (3')	23' (18')	54' (49')	W12 x 96	W21 x 55
25	3' (4')	20' (16'6")	54' (50'6")	W21 x 101	W21 x 62
30	3' (4')	23' (19')	62' (58')	W24 x 131	W18 x 76
35	3' (4')	26'6" (22')	70'6" (66')	W14 x 159	W24 x 94
40	3' (4')	29'6" (24'6")	78'6" (73'6")	W14 x 193	W24 x 104

Column and Pier Requirements (Based on ASCE 7-05 Exposure B for 130mph Wind Load)

Display Height	Pier Dia	Pier Depth	Col. Length	Unbraced Column	Braced Column
8	2' (3')	9'6" (8'6")	26'6" (25'6")	W12 x 26	W10 x 22
10	2' (3')	10'6" (9')	29'6" (28')	W10 x 33	W10 x 26
12	2' (3')	11'6" (10')	32'6" (31')	W10 x 39	W12 x 26
14	2' (3')	12'6" (10'6")	35'6" (33'6")	W10 x 45	W12 x 30
16	2' (3')	13'6" (11'6")	38'6" (36'6")	W10 x 49	W14 x 34
18	2' (3')	15' (12')	42' (39')	W12 x 53	W16 x 36
20	2' (3')	16'6" (12'6")	45'6" (41'6")	W14 x 61	W16 x 40
22	2' (3')	18'6" (14')	49'6" (45')	W12 x 72	W21 x 44
25	3' (4')	16' (13'6")	50' (47'6")	W18 x 86	W18 x 50
30	3' (4')	18'6" (15'6")	57'6" (54'6")	W12 x 106	W21 x 62
35	3' (4')	21'6" (18')	65'6" (62')	W14 x 132	W24 x 68
40	3' (4')	24' (20')	73' (69')	W14 x 159	W24 x 84

### Exposure C

#### 24 FEET WIDE INSTALLATIONS

### Exposure B

#### 24 FEET WIDE INSTALLATIONS

Column and Pier Requirements (Based on ASCE 7-05 Exposure C for 130mph Wind Load)

Display Height	Pier Dia	Pier Depth	Col Len	Unbraced Column	Braced Column *
8	2' (3')	13' (11')	31' (29')	W10 x 39	W12 x 30
10	2' (3')	15' (12')	35' (32')	W14 x 48	W14 x 34
12	2' (3')	17'6" (13'6")	39'6" (35'6")	W12 x 53	W16 x 40
14	3' (4')	15' (12'6")	39' (36'6")	W14 x 61	W21 x 44
16	3' (4')	16'6" (14')	42'6" (40')	W12 x 72	W18 x 50
18	3' (4')	18' (15')	46' (43')	W18 x 86	W21 x 55
20	3' (4')	19'6" (16'6")	49'6" (46'6")	W12 x 96	W21 x 62
22	3' (4')	21' (17'6")	53' (49'6")	W21 x 101	W21 x 68
25	3' (4')	24'6" (20'6")	59'6" (55'6")	W21 x 122	W24 x 76
30	3' (4')	28'6" (24')	68'6" (64')	W14 x 159	W24 x 94
35	3' (4')	33' (27')	78' (72')	W21 x 201	W24 x 104
40	3' (4')	37' (30'6")	87' (80'6")	W18 x 234	W24 x 131

Column and Pier Requirements (Based on ASCE 7-05 Exposure B for 130mph Wind Load)

Display Height	Pier Dia.	Pier Depth	Col. Len.	Unbraced Column	Braced Column *
8	2' (3')	11' (9'6")	29' (27'6")	W10 x 33	W10 x 26
10	2' (3')	12' (10'6")	32' (30'6")	W10 x 39	W12 x 26
12	2' (3')	13'6" (11')	35'6" (33')	W10 x 45	W14 x 30
14	3' (4')	12' (11')	36' (35')	W12 x 53	W18 x 35
16	3' (4')	13' (11'6")	39' (37'6")	W14 x 61	W16 x 40
18	3' (4')	14'6" (12')	42'6" (40')	W12 x 65	W21 x 44
20	3' (4')	15'6" (13')	45'6" (43')	W14 x 74	W16 x 50
22	3' (4')	17' (14')	49' (46')	W18 x 86	W18 x 55
25	3' (4')	19'6" (16'6")	54'6" (51'6")	W21 x 101	W21 x 62
30	3' (4')	23' (19')	63' (59')	W24 x 131	W18 x 76
35	3' (4')	26'6" (22')	71'6" (67')	W14 x 159	W24 x 94
40	3' (4')	30' (25')	80' (75')	W14 x 193	W24 x 104

### Exposure C

#### 28 FEET WIDE INSTALLATIONS

### Exposure B

#### 28 FEET WIDE INSTALLATIONS

Column and Pier Requirements (Based on ASCE 7-05 Exposure C for 130mph Wind Load)

Display Height	Pier Dia	Pier Depth	Col Len	Unbraced Column	Braced Column *
8	2' (3')	14' (11'6")	32' (29'6")	W12 x 40	W14 x 30
10	2' (3')	16'6" (12'6")	36'6" (32'6")	W14 x 48	W16 x 36
12	2' (3')	18'6" (14'6")	40'6" (36'6")	W14 x 61	W14 x 43
14	3' (4')	16' (13'6")	40' (37'6")	W12 x 65	W16 x 50
16	3' (4')	18' (15')	44' (41')	W18 x 76	W18 x 55
18	3' (4')	19'6" (16'6")	47'6" (44'6")	W18 x 86	W21 x 62
20	3' (4')	21'6" (17'6")	51'6" (47'6")	W21 x 101	W21 x 68
22	3' (4')	23' (19')	55' (51')	W24 x 104	W24 x 68
25	3' (4')	25'6" (21')	60'6" (56')	W18 x 130	W24 x 76
30	3' (4')	31' (26')	71' (66')	W18 x 175	W24 x 103
35	3' (4')	36' (29'6")	81' (74'6")	W14 x 233	W24 x 131
40	3' (4')	40'6" (33'6")	90'6" (83'6")	W18 x 258	W24 x 146

Column and Pier Requirements (Based on ASCE 7-05 Exposure B for 130mph Wind Load)

Display Height	Pier Dia	Pier Depth	Col Len	Unbraced Column	Braced Column *
8	2' (3')	11'6" (10')	29'6" (28')	W10 x 33	W12 x 26
10	2' (3')	12'6" (11')	32'6" (31')	W12 x 40	W12 x 30
12	2' (3')	14'6" (11'6")	36'6" (33'6")	W14 x 48	W14 x 34
14	3' (4')	12'6" (11')	36'6" (35')	W12 x 53	W16 x 36
16	3' (4')	14' (12')	40' (38')	W14 x 61	W21 x 44
18	3' (4')	15'6" (13')	43'6" (41')	W12 x 72	W16 x 50
20	3' (4')	17' (14')	47' (44')	W12 x 79	W18 x 55
22	3' (4')	18'6" (15'6")	50'6" (47'6")	W12 x 96	W21 x 55
25	3' (4')	20'6" (17')	55'6" (52')	W24 x 104	W21 x 62
30	3' (4')	25' (20'6")	65' (60'6")	W18 x 143	W24 x 76
35	3' (4')	28'6" (24')	73'6" (69')	W18 x 175	W21 x 101
40	3' (4')	32'6" (27')	82'6" (77')	W14 x 211	W24 x 117

#### Chart Notes:

- \* Requires that braces be placed approximately 10' from ground level that spans both columns. See detail on sheet 5. If display height is taller than 10', braces must be installed at each 10' increment in display height.
- 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  
Installation  
3 Column  
Multi-Section



Nevco, Inc.  
Greenville, Illinois 62246

Drawing No. 241-0358

Drawn DBB Date 12/14/18

Sheet 3 of 8

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### Exposure C 20 FEET WIDE INSTALLATIONS

## 150 MPH WIND ZONES

### Exposure B 20 FEET WIDE INSTALLATIONS

Rev	B
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Column and Pier Requirements (Based on ASCE 7-05 Exposure C for 150mph Wind Load)

Display Height	Pier Dia	Pier Depth	Col. Length	Unbraced Column	Braced Column *
8	2' (3')	13' (11')	30' (28')	W10 x 39	W12 x 30
10	2' (3')	15' (12')	34' (31')	W14 x 43	W14 x 34
12	2' (3')	17' (13')	38' (34')	W12 x 53	W16 x 40
14	2' (3')	19' (14'6")	42' (37'6")	W14 x 61	W21 x 44
16	2' (3')	21' (16')	46' (41')	W16 x 67	W18 x 50
18	2' (3')	23' (17'6")	50' (44'6")	W18 x 76	W18 x 55
20	2' (3')	25' (19')	54' (48')	W12 x 96	W21 x 55
22	2' (3')	28' (21'6")	59' (52'6")	W21 x 101	W21 x 68
25	3' (4')	24' (20')	58' (54')	W14 x 120	W18 x 76
30	3' (4')	28' (23')	67' (62')	W18 x 158	W24 x 94
35	3' (4')	32' (26'6")	76' (70'6")	W18 x 192	W24 x 104
40	3' (4')	36' (29'6")	85' (78'6")	W14 x 233	W24 x 131

Column and Pier Requirements (Based on ASCE 7-05 Exposure B for 150mph Wind Load)

Display Height	Pier Dia	Pier Depth	Col. Length	Unbraced Column	Braced Column *
8	2' (3')	11' (9'6")	28' (26'6")	W10 x 33	W10 x 26
10	2' (3')	12' (10')	31' (29')	W10 x 39	W12 x 26
12	2' (3')	13'6" (11')	34'6" (32')	W14 x 43	W14 x 30
14	2' (3')	15' (12')	38' (35')	W12 x 53	W18 x 35
16	2' (3')	16'6" (13')	41'6" (38')	W10 x 60	W16 x 40
18	2' (3')	18' (14')	45' (41')	W12 x 65	W21 x 44
20	2' (3')	19'6" (15')	48'6" (44')	W12 x 72	W16 x 50
22	2' (3')	22' (17')	53' (48')	W18 x 86	W18 x 55
25	3' (4')	19' (16')	53' (50')	W21 x 101	W21 x 62
30	3' (4')	22' (18'6")	61' (57'6")	W14 x 120	W24 x 68
35	3' (4')	25'6" (21'6")	69'6" (65'6")	W14 x 159	W24 x 84
40	3' (4')	29' (24')	78' (73')	W18 x 192	W21 x 101

### Exposure C 24 FEET WIDE INSTALLATIONS

Column and Pier Requirements (Based on ASCE 7-05 Exposure C for 150mph Wind Load)

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	2' (3')	18'6" (14')	38'6" (34')	W12 x 53	W16 x 40
12	2' (3')	21' (16')	43' (38')	W14 x 61	W16 x 50
14	2' (3')	24' (18')	48' (42')	W14 x 74	W18 x 55
16	2' (3')	26'6" (20')	52'6" (46')	W18 x 86	W21 x 62
18	2' (3')	29' (22')	57' (50')	W18 x 97	W21 x 68
20	2' (3')	31'6" (23'6")	61'6" (53'6")	W21 x 101	W24 x 68
22	3' (4')	25'6" (21')	57'6" (53')	W24 x 117	W24 x 76
25	3' (4')	29'6" (24'6")	64'6" (59'6")	W24 x 146	W24 x 94
30	3' (4')	35' (28'6")	75' (68'6")	W18 x 192	W24 x 117
35	3' (4')	40' (33')	85' (78')	W18 x 234	W24 x 146
40	3' (4')	45' (37')	95' (87')	W18 x 283	W24 x 176

### Exposure B 24 FEET WIDE INSTALLATIONS

Column and Pier Requirements (Based on ASCE 7-05 Exposure B for 150mph Wind Load)

Display Height	Pier Dia	Pier Depth	Col. Length	Unbraced Column	Braced Column *
8	2' (3')	12' (10'6")	30' (28'6")	W14 x 38	W12 x 30
10	2' (3')	14' (11'6")	34' (31'6")	W14 x 43	W14 x 34
12	2' (3')	16' (12'6")	38' (34'6")	W12 x 53	W16 x 36
14	2' (3')	18'6" (14')	42'6" (38')	W14 x 61	W21 x 44
16	2' (3')	20'6" (15'6")	46'6" (41'6")	W16 x 67	W16 x 50
18	2' (3')	22'6" (17')	50'6" (45')	W18 x 76	W18 x 55
20	2' (3')	24'6" (18'6")	54'6" (48'6")	W18 x 86	W21 x 55
22	3' (4')	20' (17')	52' (49')	W21 x 101	W21 x 62
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')	32' (26'6")	77' (71'6")	W18 x 192	W24 x 104
40	3' (4')	36' (29'6")	86' (79'6")	W14 x 233	W24 x 131

### Exposure C 28 FEET WIDE INSTALLATIONS

Column and Pier Requirements (Based on ASCE 7-05 Exposure C for 150mph Wind Load)

Display Height	Pier Dia	Pier Depth	Col Length	Unbraced Column	Braced Column *
8	2' (3')	17' (13')	35' (31')	W14 x 48	W16 x 36
10	2' (3')	19'6" (15')	39'6" (35')	W14 x 61	W21 x 44
12	2' (3')	22'6" (17')	44'6" (39')	W16 x 67	W18 x 50
14	2' (3')	25'6" (19'6")	49'6" (43'6")	W18 x 76	W21 x 55
16	2' (3')	28'6" (21'6")	54'6" (47'6")	W18 x 97	W21 x 62
18	2' (3')	31'6" (24')	59'6" (52')	W21 x 101	W24 x 68
20	2' (3')	34' (26')	64' (56')	W21 x 111	W24 x 76
22	3' (4')	28' (23')	60' (55')	W24 x 131	W24 x 84
25	3' (4')	31' (25'6")	66' (60'6")	W18 x 158	W21 x 101
30	3' (4')	38' (31')	78' (71')	W21 x 201	W24 x 131
35	3' (4')	44' (36')	89' (81')	W18 x 258	W24 x 162
40	3' (4')	49'6" (40'6")	99'6" (90'6")	W18 x 311	W24 x 192

### Exposure B 28 FEET WIDE INSTALLATIONS

Column and Pier Requirements (Based on ASCE 7-05 Exposure B for 150mph Wind Load)

Display Height	Pier Dia	Pier Depth	Col Length	Unbraced Column	Braced Column *
8	2' (3')	13' (11')	31' (29')	W10 x 39	W12 x 30
10	2' (3')	15'6" (12')	35'6" (32')	W14 x 48	W14 x 34
12	2' (3')	17'6" (13'6")	39'6" (35'6")	W12 x 53	W16 x 40
14	2' (3')	19'6" (15')	43'6" (39')	W14 x 61	W21 x 44
16	2' (3')	22' (17')	48' (43')	W14 x 74	W18 x 50
18	2' (3')	24'6" (18'6")	52'6" (46'6")	W18 x 86	W21 x 55
20	2' (3')	26'6" (20'6")	56'6" (50'6")	W18 x 97	W21 x 62
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")	W21 x 122	W24 x 76
30	3' (4')	30' (25')	70' (65')	W24 x 162	W21 x 101
35	3' (4')	34'6" (28'6")	79'6" (73'6")	W21 x 201	W24 x 117
40	3' (4')	39' (32'6")	89' (82'6")	W14 x 257	W24 x 146

#### Chart Notes:

- \* Requires that braces be placed approximately 10' from ground level that spans both columns. See detail on sheet 5. If display height is taller than 10', braces must be installed at each 10' increment in display height.
- 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  
Installation  
3 Column  
Multi-Section

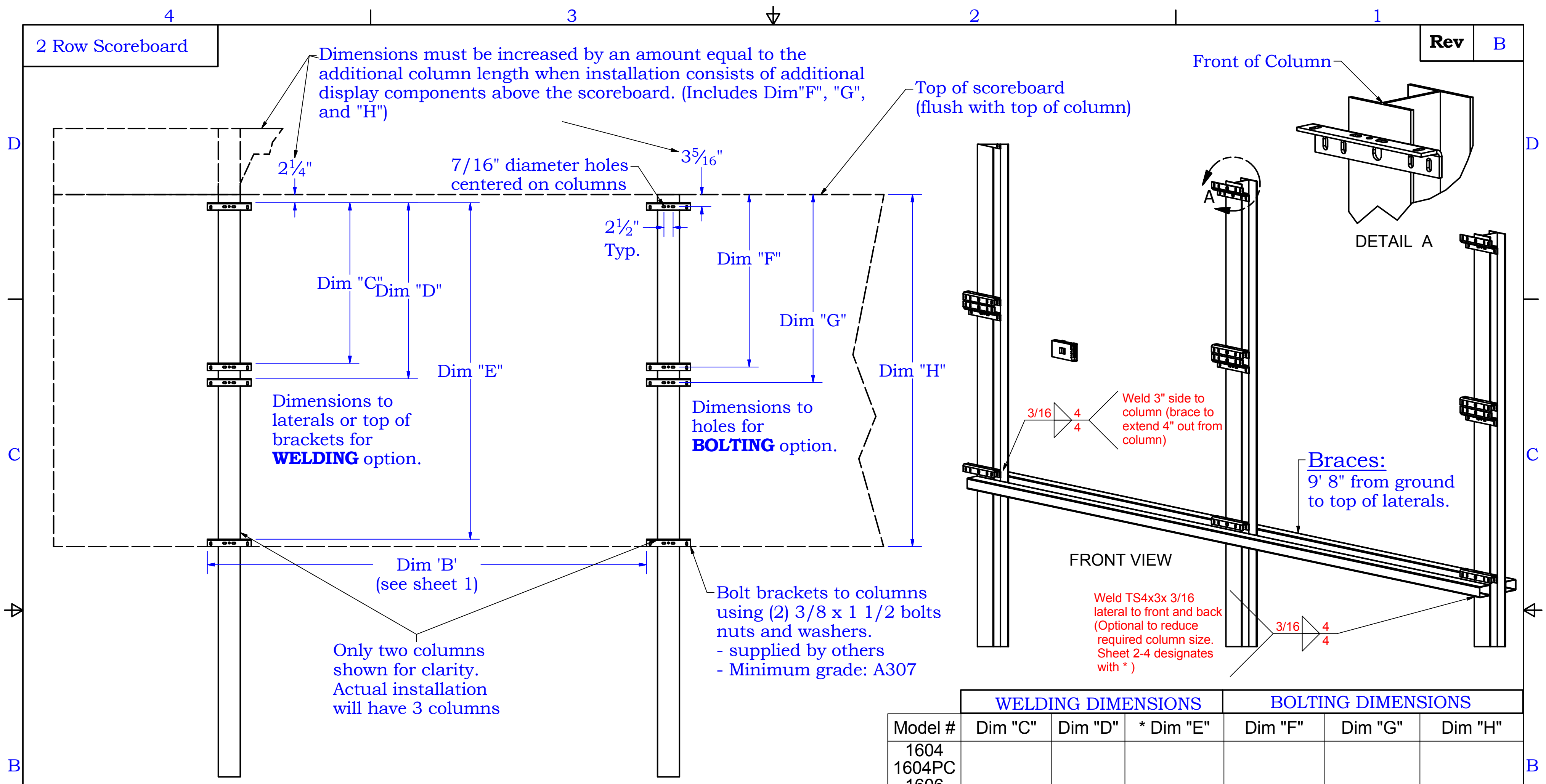


Nevco, Inc.  
Greenville, Illinois 62246

Drawing No. 241-0358

Drawn DBB Date 12/14/18

Sheet 4 of 8




- 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

NOTE: Minimum bolt grade is A307 (not required if welding brackets to columns)

HARDWARE SUPPLIED BY OTHERS	
Description	Quantity
3/8 x 1 1/2 Bolt	24
3/8 Flat Washer	48
3/8 Lock Washer	24
3/8 Nut	24
3/8-16 eye bolts (see sheet 6)	2

Model #	WELDING DIMENSIONS			BOLTING DIMENSIONS		
	Dim "C"	Dim "D"	* Dim "E"	Dim "F"	Dim "G"	Dim "H"
1604						
1604PC						
1606						
1606PC						
3615						
3617						
3618						
3619	43 7/8"	48 1/8"	91 15/16"	47 5/32"	51 7/16"	95 1/4"
3621						
3682						
3685						
7630						
7631						
7632						
7685						

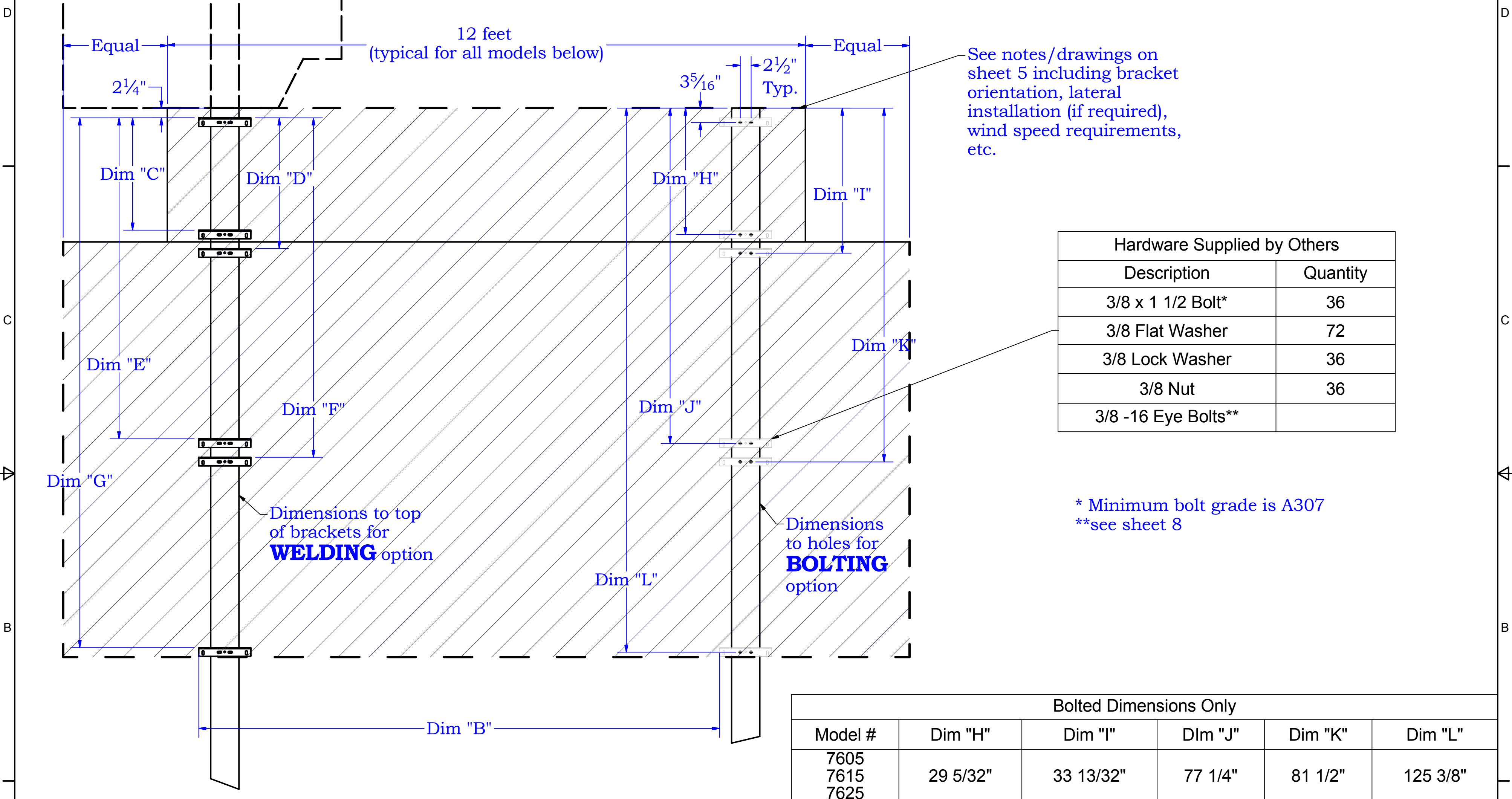
- Notes:**
- 1) If welding brackets to columns, According to IBC standards, all welds are to be performed by AWS certified welder. The city in which the display is installed may waive this standard. Contact local officials if necessary.
  - 2) **FOR HIGH WIND AREAS:** For installations in wind zones higher than 150 mph, brackets must 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.

Outdoor Scoreboard Installation 3 Column Multi-Section		 <b>NeVco, Inc.</b> Greenville, Illinois 62246					
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Rev B



Dimensions must be increased by an amount equal to the additional column length when installation consists of additional display components above the scoreboard. (Includes dimensions for welded or bolted option.)




See notes/drawings on sheet 5 including bracket orientation, lateral installation (if required), wind speed requirements, etc.

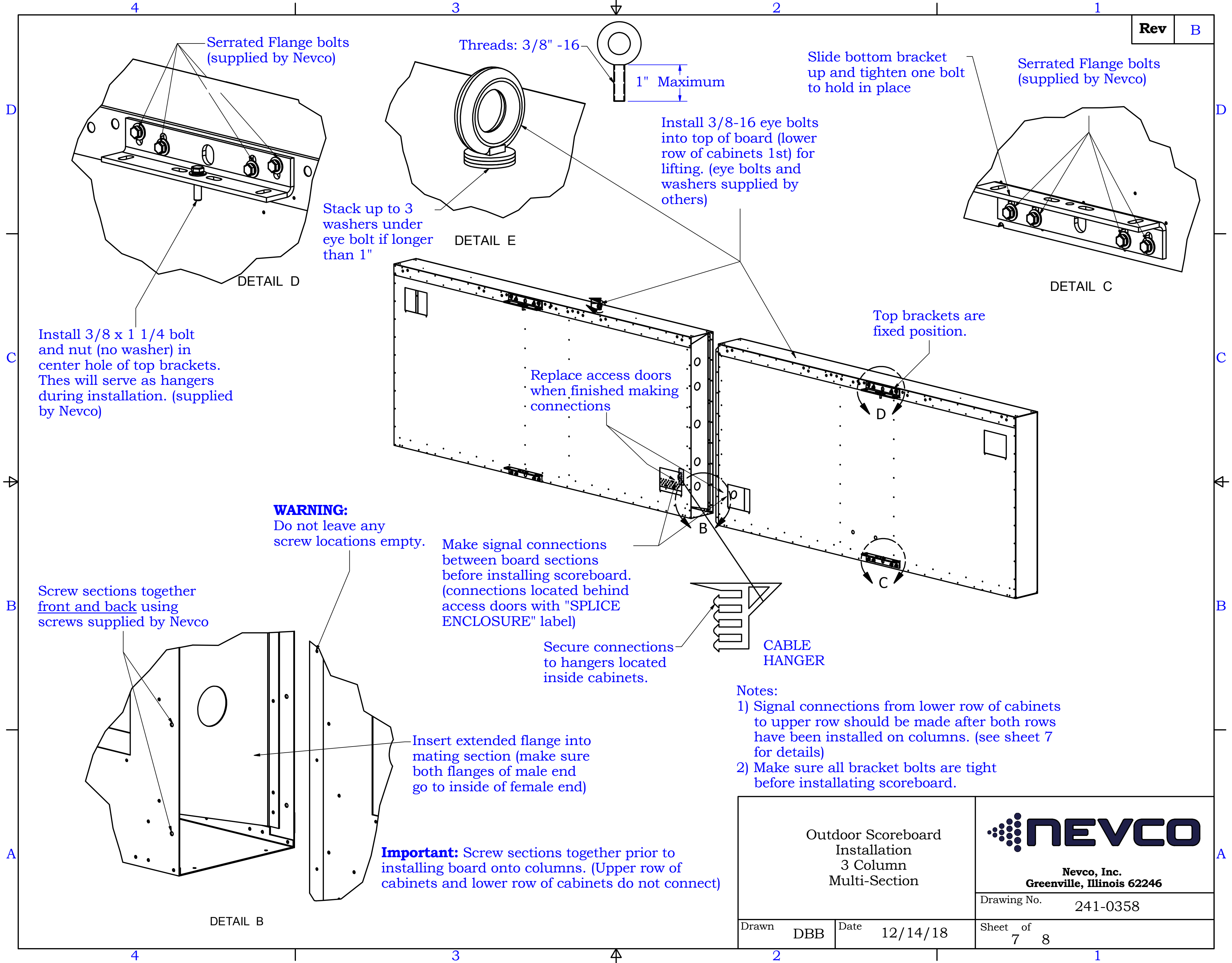
Hardware Supplied by Others	
Description	Quantity
3/8 x 1 1/2 Bolt*	36
3/8 Flat Washer	72
3/8 Lock Washer	36
3/8 Nut	36
3/8 -16 Eye Bolts**	

\* Minimum bolt grade is A307  
 \*\*see sheet 8

Bolted Dimensions Only					
Model #	Dim "H"	Dim "I"	Dim "J"	Dim "K"	Dim "L"
7605					
7615	29 5/32"	33 13/32"	77 1/4"	81 1/2"	125 3/8"
7625					

Welding Dimensions Only					
Model #	Dim "C"	Dim "D"	Dim "E"	Dim "F"	Dim "G"
7605					
7615	25 7/8"	30 3/32"	73 15/16"	78 3/16"	122 1/16"
7625					

Outdoor Scoreboard Installation 3 Column Multi-Section		 Nevco, Inc. Greenville, Illinois 62246	
Drawn DBB	Date 12/14/18	Sheet 6 of 8	



Serrated Flange bolts (supplied by Nevco)

Threads: 3/8" -16

1" Maximum

Slide bottom bracket up and tighten one bolt to hold in place

Serrated Flange bolts (supplied by Nevco)

Install 3/8-16 eye bolts into top of board (lower row of cabinets 1st) for lifting. (eye bolts and washers supplied by others)

Stack up to 3 washers under eye bolt if longer than 1"

DETAIL E

DETAIL D

DETAIL C

Install 3/8 x 1 1/4 bolt and nut (no washer) in center hole of top brackets. This will serve as hangers during installation. (supplied by Nevco)

Top brackets are fixed position.

Replace access doors when finished making connections

**WARNING:** Do not leave any screw locations empty.

Make signal connections between board sections before installing scoreboard. (connections located behind access doors with "SPICE ENCLOSURE" label)

Screw sections together front and back using screws supplied by Nevco

Secure connections to hangers located inside cabinets.

CABLE HANGER


Notes:

- 1) Signal connections from lower row of cabinets to upper row should be made after both rows have been installed on columns. (see sheet 7 for details)
- 2) Make sure all bracket bolts are tight before installing scoreboard.

Insert extended flange into mating section (make sure both flanges of male end go to inside of female end)

**Important:** Screw sections together prior to installing board onto columns. (Upper row of cabinets and lower row of cabinets do not connect)

DETAIL B

Outdoor Scoreboard Installation 3 Column Multi-Section		 <b>Nevco, Inc.</b> Greenville, Illinois 62246					
			Drawing No. 241-0358				
Drawn	DBB	Date	12/14/18	Sheet	of	7	8

Remove eye bolts from first row and install on second row

Spreader bar preferred for lifting (see installation instructions for more details)

Note: Details below show only two columns for clarity. Actual installation will have 3 columns.

Make power/signal connection between upper and lower rows of cabinets after board has been installed.

- connections located behind access doors
- Pull cables from lower section into upper section (connections must be made and permanently located in upper section)

CABLE HANGER

Tighten all bracket bolts on first row before installation of second row

**WARNING:**  
Do not lift scoreboards with any other additional weight attached such as laterals or other structural components

Install top row and tighten all bracket bolts.

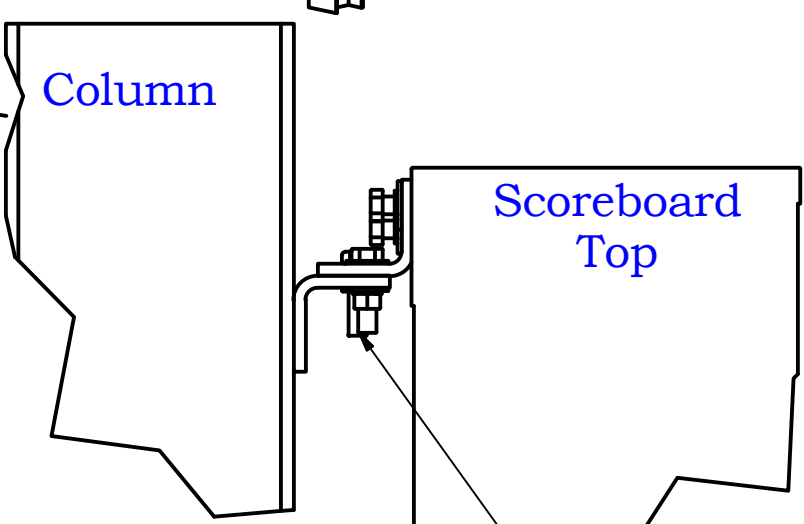
Secure connections to hangers located inside cabinets.

Scoreboard

STEP ONE  
Install First Row

STEP TWO  
Install Second Row

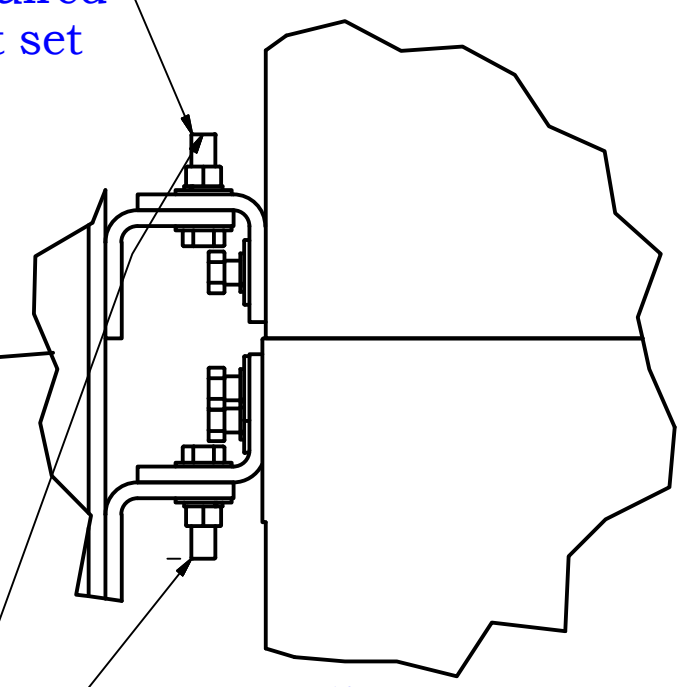
Bolt installed in top brackets of each row will serve as hanger



2 Bolts required per bracket set

Detail F

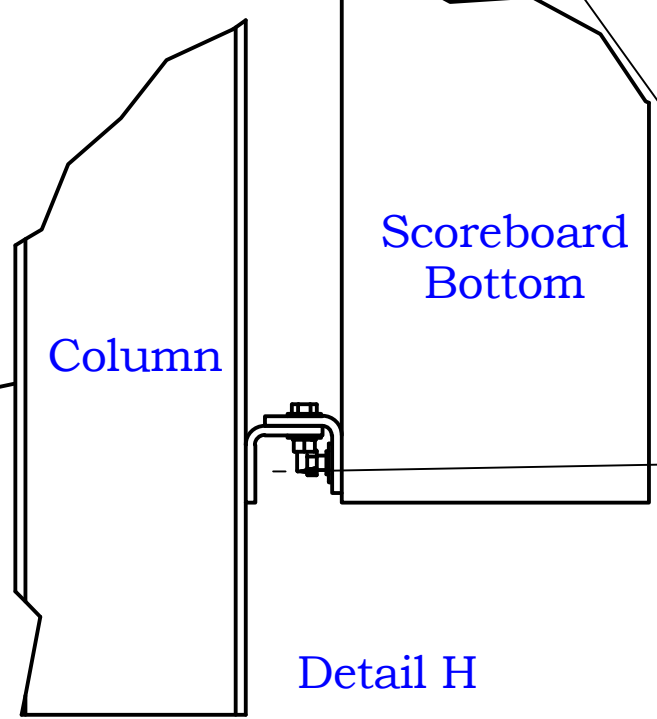
Upper Section



Bolt brackets together using bolts, nuts, washers and lock washers supplied by Nevco. (3/8 x 1 3/4 bolts)

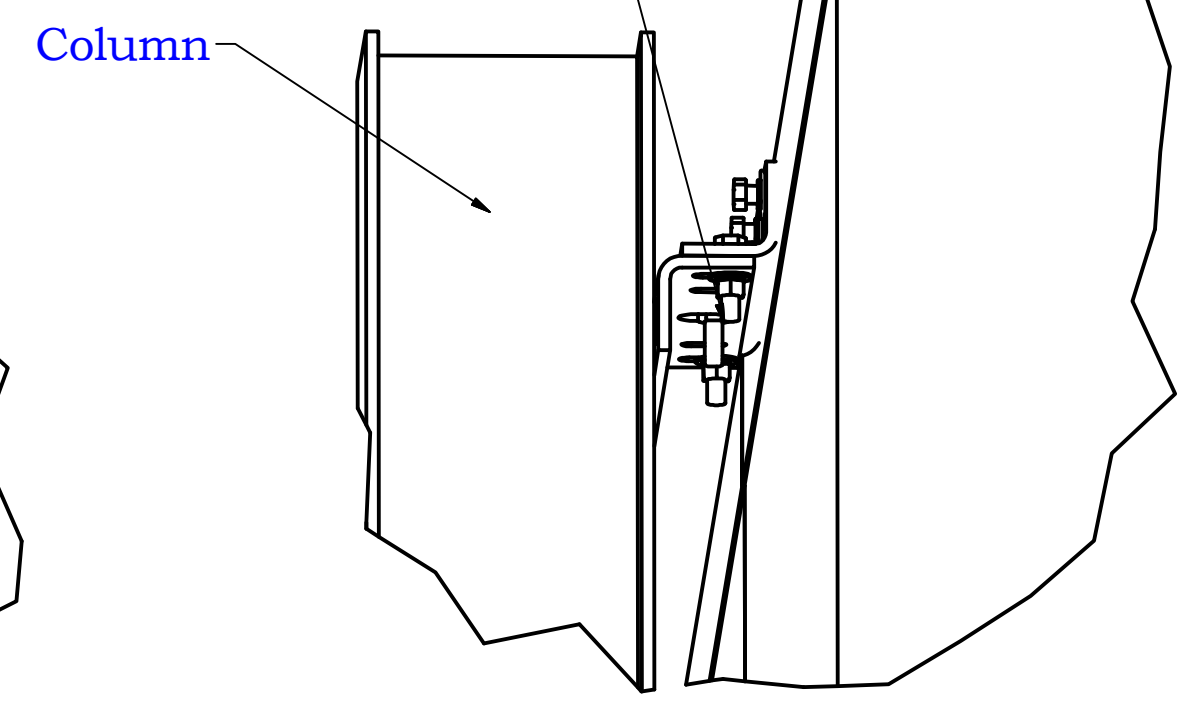
Detail G

Lower Section

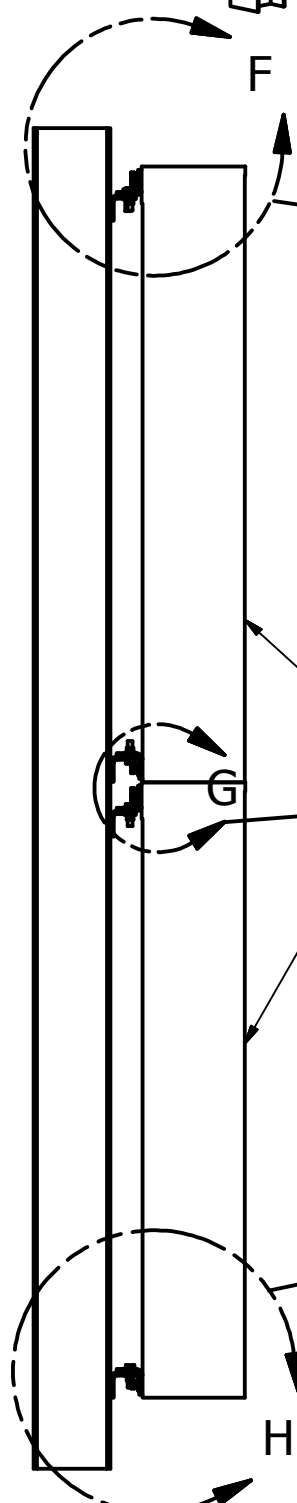


Detail H

Column



Hanging Detail



Side View  
Scoreboard Installation

Outdoor Scoreboard Installation 3 Column Multi-Section	
Drawn	DBB
Date	12/14/18

**NEVCO**

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Greenville, Illinois 62246

Drawing No. 241-0358

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