

**TIE DOWN ENGINEERING, INC.**  
GROUND ANCHOR SUMMARY CHART

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Model Number	Anchor Description	Soil Type as Tested	Tested Soil Capacity (ft.lb.)	Anchor Capacity (lbs)
59040	3/4" x 60" w/ Single 8" Helix	4	275	3400
59045	3/4" x 48" w/ Single 6" Helix	4	325	5000
59050	1/2" x 15" w/ Single 4" Helix	2	500	800
59052	3/4" x 42" w/ Single 4" Helix	3	375	4300
59055	1/2" x 30" w/ Single 4" Helix	2	500	2400
59055THG	1/2" x 30" w/ Double 4" Helix	2	500	2250
59060	5/8" x 40" w/ Single 6" Helix	3	375	4500
59065	5/8" x 48" w/ Single 6" Helix	4	300	3000

**NOTES:**

- 1) In most cases, the limiting capacity was due to vertical displacement of the anchor in the test soil. Model numbers 59055, 59055THG and 59060 yielded due to anchor loads.
- 2) Anchor loads listed are based upon the soil conditions tested. Actual soil conditions will vary, yielding different anchor capacities.
- 3) This chart is to serve as a reference of what vertical anchor capacities can occur using the soil conditions listed within.



# TIE DOWN ENGINEERING, INC.

Wind Zone: 1

Anchor Description: 5/8" x 48" Eye Anchor w/ 6" Helix  
 Model Number: 59065

Building Width (ft.)	Building Length (ft.)														
	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32
5	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
6	-	2	2	2	2	2	2	2	2	2	2	2	2	2	2
7	-	-	2	2	2	2	2	2	2	2	2	2	2	2	2
8	-	-	2	2	2	2	2	2	2	2	2	2	2	2	2
10	-	-	-	2	2	2	2	2	2	2	2	2	2	2	2
12	-	-	-	-	2	2	2	2	2	2	2	2	2	2	2
14	-	-	-	-	-	2	2	2	2	2	2	2	2	2	2
16	-	-	-	-	-	-	2	2	2	2	2	2	2	3	3
18	-	-	-	-	-	-	-	2	2	2	2	2	3	3	3

**NOTES:**

- 1) Maximum 102" building height
- 2) One anchor shall be placed at each corner of building.
- 3) Any required anchors between corners shall be spaced equidistant apart from each other.
- 4) Number of anchors required per side shall be determined by finding quantities listed in columns.

For example: 12' x 18' Building

Looking in 12' column - Use lowest value in 12' column for number of anchors = 2

Looking in 18' column - find the corresponding width of 12' to obtain number of anchors for 18' side = 2  
 If building width exceeds the widths shown in the Building Width column, use lowest number of anchors in corresponding Building Length column.

- 5) Anchors at corners shall be included in the quantity required for each side or face of building.
- 6) In some cases where anchor quantity is not indicated, a deeper anchor will need to be used due to otherwise too close of spacing of anchors.



# TIE DOWN ENGINEERING, INC.

Wind Zone: 2

Anchor Description: 5/8" x 48" Eye Anchor w/ 6" Helix

Model Number: 59065

Building Width (ft.)	Building Length (ft.)														
	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32
5	2	2	2	2	3	3	4	4	4	5	5	5	6	6	7
6	-	2	2	2	3	3	3	4	4	4	5	5	5	6	6
7	-	-	2	2	2	3	3	3	4	4	4	5	5	5	6
8	-	-	2	2	2	3	3	3	4	4	4	4	5	5	5
10	-	-	-	2	2	3	3	3	3	4	4	4	5	5	5
12	-	-	-	-	2	3	3	3	3	4	4	4	5	5	5
14	-	-	-	-	-	3	3	3	4	4	4	4	5	5	5
16	-	-	-	-	-	-	3	3	4	4	4	5	5	5	6
18	-	-	-	-	-	-	-	4	4	4	5	5	5	6	6



**NOTES:**

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For example: 12' x 18' Building

Looking in 12' column - Use lowest value in 12' column for number of anchors = 2

Looking in 18' column - find the corresponding width of 12' to obtain number of anchors for 18' side = 3  
 If building width exceeds the widths shown in the Building Width column, use lowest number of anchors in corresponding Building Length column.

- 5) Anchors at corners shall be included in the quantity required for each side or face of building.
- 6) In some cases where anchor quantity is not indicated, a deeper anchor will need to be used due to otherwise too close of spacing of anchors.



# TIE DOWN ENGINEERING, INC.

Wind Zone: 3

Anchor Description: 5/8" x 48" Eye Anchor w/ 6" Helix  
 Model Number: 59065

Building Width (ft.)	Building Length (ft.)														
	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32
5	2	2	2	3	3	4	4	5	5	6	6	6	7	7	8
6	-	2	2	3	3	3	4	4	5	5	5	6	6	7	7
7	-	-	2	2	3	3	4	4	4	5	5	5	6	6	7
8	-	-	2	2	3	3	3	4	4	5	5	5	6	6	6
10	-	-	-	2	3	3	3	4	4	4	5	5	5	6	6
12	-	-	-	-	3	3	3	4	4	4	5	5	5	6	6
14	-	-	-	-	-	3	3	4	4	5	5	5	6	6	6
16	-	-	-	-	-	-	4	4	4	5	5	5	6	6	7
18	-	-	-	-	-	-	-	4	5	5	5	6	6	7	7

**NOTES:**

- 1) Maximum 102" building height
- 2) One anchor shall be placed at each corner of building.
- 3) Any required anchors between corners shall be spaced equidistant apart from each other.
- 4) Number of anchors required per side shall be determined by finding quantities listed in columns.

For example: 12' x 18' Building

Looking in 12' column - Use lowest value in 12' column for number of anchors = 3

Looking in 18' column - find the corresponding width of 12' to obtain number of anchors for 18' side = 4  
 If building width exceeds the widths shown in the Building Width column, use lowest number of anchors in corresponding Building Length column.

- 5) Anchors at corners shall be included in the quantity required for each side or face of building.
- 6) In some cases where anchor quantity is not indicated, a deeper anchor will need to be used due to otherwise too close of spacing of anchors.



## TIE DOWN ENGINEERING, INC.

Wind Zone: 1

Anchor Description: 5/8" x 40" Eye Anchor w/ 6" Helix  
 Model Number: 59060

Building Width (ft.)	Building Length (ft.)														
	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32
5	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
6	-	2	2	2	2	2	2	2	2	2	2	2	2	2	2
7	-	-	2	2	2	2	2	2	2	2	2	2	2	2	2
8	-	-	2	2	2	2	2	2	2	2	2	2	2	2	2
10	-	-	-	2	2	2	2	2	2	2	2	2	2	2	2
12	-	-	-	-	2	2	2	2	2	2	2	2	2	2	2
14	-	-	-	-	-	2	2	2	2	2	2	2	2	2	2
16	-	-	-	-	-	-	2	2	2	2	2	2	2	2	2
18	-	-	-	-	-	-	-	2	2	2	2	2	2	2	2



**NOTES:**

- 1) Maximum 102" building height
- 2) One anchor shall be placed at each corner of building.
- 3) Any required anchors between corners shall be spaced equidistant apart from each other.
- 4) Number of anchors required per side shall be determined by finding quantities listed in columns.

For example: 12' x 18' Building

Looking in 12' column - Use lowest value in 12' column for number of anchors = 2

Looking in 18' column - find the corresponding width of 12' to obtain number of anchors for 18' side = 2  
 If building width exceeds the widths shown in the Building Width column, use lowest number of anchors in corresponding Building Length column.

- 5) Anchors at corners shall be included in the quantity required for each side or face of building.
- 6) In some cases where anchor quantity is not indicated, a deeper anchor will need to be used due to otherwise too close of spacing of anchors.



## TIE DOWN ENGINEERING, INC.

Anchor Description: 5/8" x 40" Eye Anchor w/ 6" Helix  
Model Number: 59060

Wind Zone: 2

Building Width (ft.)	Building Length (ft.)														
	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32
5	2	2	2	2	2	2	3	3	3	4	4	4	4	5	5
6	-	2	2	2	2	2	3	3	3	3	4	4	4	4	5
7	-	-	2	2	2	2	2	3	3	3	3	4	4	4	4
8	-	-	2	2	2	2	2	3	3	3	3	3	4	4	4
10	-	-	-	2	2	2	2	2	3	3	3	3	4	4	4
12	-	-	-	-	2	2	2	2	3	3	3	3	4	4	4
14	-	-	-	-	-	2	2	3	3	3	3	3	4	4	4
16	-	-	-	-	-	-	2	3	3	3	3	4	4	4	4
18	-	-	-	-	-	-	-	3	3	3	3	4	4	4	4

**NOTES:**

- 1) Maximum 102" building height
- 2) One anchor shall be placed at each corner of building.
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- 4) Number of anchors required per side shall be determined by finding quantities listed in columns.

For example: 12' x 18' Building

Looking in 12' column - Use lowest value in 12' column for number of anchors = 2

Looking in 18' column - find the corresponding width of 12' to obtain number of anchors for 18' side = 2  
If building width exceeds the widths shown in the Building Width column, use lowest number of anchors in corresponding Building Length column.

- 5) Anchors at corners shall be included in the quantity required for each side or face of building.
- 6) In some cases where anchor quantity is not indicated, a deeper anchor will need to be used due to otherwise too close of spacing of anchors.



## TIE DOWN ENGINEERING, INC.

Wind Zone: 3

Anchor Description: 5/8" x 40" Eye Anchor w/ 6" Helix  
 Model Number: 59060

Building Width (ft.)	Building Length (ft.)														
	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32
5	2	2	2	2	3	3	3	4	4	4	5	5	5	6	6
6	-	2	2	2	2	3	3	3	4	4	4	4	5	5	5
7	-	-	2	2	2	2	3	3	3	4	4	4	4	5	5
8	-	-	2	2	2	2	3	3	3	3	4	4	4	5	5
10	-	-	-	2	2	2	3	3	3	3	4	4	4	4	5
12	-	-	-	-	2	2	3	3	3	3	4	4	4	4	5
14	-	-	-	-	-	2	3	3	3	3	4	4	4	5	5
16	-	-	-	-	-	-	3	3	3	4	4	4	4	5	5
18	-	-	-	-	-	-	-	3	3	4	4	4	5	5	5

**NOTES:**

- 1) Maximum 102" building height
- 2) One anchor shall be placed at each corner of building.
- 3) Any required anchors between corners shall be spaced equidistant apart from each other.
- 4) Number of anchors required per side shall be determined by finding quantities listed in columns.

For example: 12' x 18' Building

Looking in 12' column - Use lowest value in 12' column for number of anchors = 2

Looking in 18' column - find the corresponding width of 12' to obtain number of anchors for 18' side = 3  
 If building width exceeds the widths shown in the Building Width column, use lowest number of anchors in corresponding Building Length column.

- 5) Anchors at corners shall be included in the quantity required for each side or face of building.
- 6) In some cases where anchor quantity is not indicated, a deeper anchor will need to be used due to otherwise too close of spacing of anchors.



# TIE DOWN ENGINEERING, INC.

Wind Zone: 1

Anchor Description: 1/2" x 30" Eye Anchor w/ 4" Helix  
 Model Number: 59055THG

Building Width (ft.)	Building Length (ft.)														
	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32
5	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3
6	-	2	2	2	2	2	2	2	2	2	3	3	3	3	3
7	-	-	2	2	2	2	2	2	2	2	3	3	3	3	3
8	-	-	2	2	2	2	2	2	2	2	3	3	3	3	3
10	-	-	-	2	2	2	2	2	2	3	3	3	3	3	3
12	-	-	-	-	2	2	2	2	2	3	3	3	3	3	4
14	-	-	-	-	-	2	2	2	3	3	3	3	4	4	4
16	-	-	-	-	-	-	2	3	3	3	3	4	4	4	4
18	-	-	-	-	-	-	-	3	3	3	4	4	4	4	5

**NOTES:**

- 1) Maximum 102" building height
- 2) One anchor shall be placed at each corner of building.
- 3) Any required anchors between corners shall be spaced equidistant apart from each other.
- 4) Number of anchors required per side shall be determined by finding quantities listed in columns.  
 For example: 12' x 18' Building  
 Looking in 12' column - Use lowest value in 12' column for number of anchors = 2  
 Looking in 18' column - find the corresponding width of 12' to obtain number of anchors for 18' side = 2  
 If building width exceeds the widths shown in the Building Width column, use lowest number of anchors in corresponding Building Length column.
- 5) Anchors at corners shall be included in the quantity required for each side or face of building.
- 6) In some cases where anchor quantity is not indicated, a deeper anchor will need to be used due to otherwise too close of spacing of anchors.



# TIE DOWN ENGINEERING, INC.

Anchor Description: 1/2" x 30" Eye Anchor w/ 4" Helix  
Model Number: 59055THG

Wind Zone: 2

Building Width (ft.)	Building Length (ft.)														
	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32
5	2	2	3	4	4	5	6	6	7	8	8	9	10	10	11
6	-	2	3	3	4	5	5	6	6	7	8	8	9	9	10
7	-	-	3	3	4	4	5	5	6	7	7	8	8	9	9
8	-	-	3	3	4	4	5	5	6	6	7	7	8	8	9
10	-	-	-	3	4	4	5	5	6	6	7	7	8	8	9
12	-	-	-	-	4	4	5	5	6	6	7	7	8	8	9
14	-	-	-	-	-	4	5	5	6	6	7	7	8	8	9
16	-	-	-	-	-	-	5	5	6	7	7	8	8	9	9
18	-	-	-	-	-	-	-	6	6	7	7	8	9	9	10

**NOTES:**

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- 3) Any required anchors between corners shall be spaced equidistant apart from each other.
- 4) Number of anchors required per side shall be determined by finding quantities listed in columns.

For example: 12' x 18' Building

Looking in 12' column - Use lowest value in 12' column for number of anchors = 4

Looking in 18' column - find the corresponding width of 12' to obtain number of anchors for 18' side = 5  
If building width exceeds the widths shown in the Building Width column, use lowest number of anchors in corresponding Building Length column.

- 5) Anchors at corners shall be included in the quantity required for each side or face of building.
- 6) In some cases where anchor quantity is not indicated, a deeper anchor will need to be used due to otherwise too close of spacing of anchors.



# TIE DOWN ENGINEERING, INC.

Wind Zone: 3

Anchor Description: 1/2" x 30" Eye Anchor w/ 4" Helix  
Model Number: 59055THG

Building Width (ft.)	Building Length (ft.)														
	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32
5				4	5	6	7	8	8	9	10	11	12	12	13
6		3	3	4	5	5	6	7	8	8	9	10	10	11	12
7			3	4	4	5	6	6	7	8	8	9	10	10	11
8				4	4	5	6	6	7	7	8	9	9	10	11
10					4	5	5	6	7	7	8	8	9	10	10
12						5	5	6	7	7	8	8	9	10	10
14							5	6	7	7	8	9	9	10	11
16								6	7	8	8	9	10	10	11
18									7	8	9	10	10	11	12

**NOTES:**

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- 4) Number of anchors required per side shall be determined by finding quantities listed in columns.

For example: 12' x 18' Building

Looking in 12' column - Use lowest value in 12' column for number of anchors = 4

Looking in 18' column - find the corresponding width of 12' to obtain number of anchors for 18' side = 6  
If building width exceeds the widths shown in the Building Width column, use lowest number of anchors in corresponding Building Length column.

- 5) Anchors at corners shall be included in the quantity required for each side or face of building.
- 6) In some cases where anchor quantity is not indicated, a deeper anchor will need to be used due to otherwise too close of spacing of anchors.



# TIE DOWN ENGINEERING, INC.

Wind Zone: 1      Anchor Description: 1/2" x 30" Eye Anchor w/ 4" Helix  
 Model Number: 59055

Building Width (ft.)	Building Length (ft.)														
	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32
5	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3
6	-	2	2	2	2	2	2	2	2	2	3	3	3	3	3
7	-	-	2	2	2	2	2	2	2	2	3	3	3	3	3
8	-	-	2	2	2	2	2	2	2	2	3	3	3	3	3
10	-	-	-	2	2	2	2	2	2	2	3	3	3	3	3
12	-	-	-	-	2	2	2	2	2	3	3	3	3	3	4
14	-	-	-	-	-	2	2	2	3	3	3	3	3	4	4
16	-	-	-	-	-	-	2	3	3	3	3	3	4	4	4
18	-	-	-	-	-	-	-	3	3	3	3	4	4	4	4

**NOTES:**

- 1) Maximum 102" building height
- 2) One anchor shall be placed at each corner of building.
- 3) Any required anchors between corners shall be spaced equidistant apart from each other.
- 4) Number of anchors required per side shall be determined by finding quantities listed in columns.  
  
 For example:    12' x 18' Building  
 Looking in 12' column - Use lowest value in 12' column for number of anchors =    2  
 Looking in 18' column - find the corresponding width of 12' to obtain number of anchors for 18' side =    2  
 If building width exceeds the widths shown in the Building Width column, use lowest number of anchors in corresponding Building Length column.
- 5) Anchors at corners shall be included in the quantity required for each side or face of building.
- 6) In some cases where anchor quantity is not indicated, a deeper anchor will need to be used due to otherwise too close of spacing of anchors.



# TIE DOWN ENGINEERING, INC.

Wind Zone: 2

Anchor Description: 1/2" x 30" Eye Anchor w/ 4" Helix  
 Model Number: 59055

Building Width (ft.)	Building Length (ft.)															
	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32	
5	2	2	3	4	4	5	6	6	7	7	8	9	9	10	11	
6	-	2	3	3	4	5	5	6	6	7	7	8	9	9	10	
7	-	-	3	3	4	4	5	5	6	6	7	7	8	8	9	
8	-	-	3	3	4	4	5	5	6	6	7	7	8	8	9	
10	-	-	-	3	3	4	4	5	5	6	6	7	7	8	8	
12	-	-	-	-	3	4	4	5	5	6	6	7	7	8	8	
14	-	-	-	-	-	4	4	5	5	6	7	7	8	8	9	
16	-	-	-	-	-	-	5	5	6	6	7	7	8	8	9	
18	-	-	-	-	-	-	-	6	6	7	7	8	8	9	9	



**NOTES:**

- 1) Maximum 102" building height
- 2) One anchor shall be placed at each corner of building.
- 3) Any required anchors between corners shall be spaced equidistant apart from each other.
- 4) Number of anchors required per side shall be determined by finding quantities listed in columns.

For example: 12' x 18' Building

Looking in 12' column - Use lowest value in 12' column for number of anchors = 3

Looking in 18' column - find the corresponding width of 12' to obtain number of anchors for 18' side = 5  
 If building width exceeds the widths shown in the Building Width column, use lowest number of anchors in corresponding Building Length column.

- 5) Anchors at corners shall be included in the quantity required for each side or face of building.
- 6) In some cases where anchor quantity is not indicated, a deeper anchor will need to be used due to otherwise too close of spacing of anchors.



## TIE DOWN ENGINEERING, INC.

Wind Zone: 3

Anchor Description: 1/2" x 30" Eye Anchor w/ 4" Helix  
 Model Number: 59055

Building Width (ft.)	Building Length (ft.)															
	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32	
5	2	3	4	4	5	6	7	7	8	9	10	10	11	12	13	
6	-	3	3	4	5	5	6	7	7	8	9	9	10	11	12	
7	-	-	3	4	4	5	6	6	7	8	8	9	9	10	11	
8	-	-	3	4	4	5	5	6	7	7	8	8	9	10	10	
10	-	-	-	3	4	5	5	6	6	7	8	8	9	9	10	
12	-	-	-	-	4	5	5	6	6	7	8	8	9	9	10	
14	-	-	-	-	-	5	5	6	7	7	8	8	9	10	10	
16	-	-	-	-	-	-	6	6	7	8	8	9	9	10	11	
18	-	-	-	-	-	-	-	7	7	8	9	9	10	11	11	

**NOTES:**

- 1) Maximum 102" building height
- 2) One anchor shall be placed at each corner of building.
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- 4) Number of anchors required per side shall be determined by finding quantities listed in columns.  
  
 For example:    12' x 18' Building  
  
 Looking in 12' column - Use lowest value in 12' column for number of anchors =    4  
  
 Looking in 18' column - find the corresponding width of 12' to obtain number of anchors for 18' side =    6  
 if building width exceeds the widths shown in the Building Width column, use lowest number of anchors in corresponding Building Length column.
- 5) Anchors at corners shall be included in the quantity required for each side or face of building.
- 6) In some cases where anchor quantity is not indicated, a deeper anchor will need to be used due to otherwise too close of spacing of anchors.



# TIE DOWN ENGINEERING, INC.

Wind Zone: 1

Anchor Description: 3/4" x 42" Eye Anchor w/ 4" Helix  
 Model Number: 59052

Building Width (ft.)	Building Length (ft.)														
	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32
5	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
6	-	2	2	2	2	2	2	2	2	2	2	2	2	2	2
7	-	-	2	2	2	2	2	2	2	2	2	2	2	2	2
8	-	-	2	2	2	2	2	2	2	2	2	2	2	2	2
10	-	-	-	2	2	2	2	2	2	2	2	2	2	2	2
12	-	-	-	-	2	2	2	2	2	2	2	2	2	2	2
14	-	-	-	-	-	2	2	2	2	2	2	2	2	2	2
16	-	-	-	-	-	-	2	2	2	2	2	2	2	2	2
18	-	-	-	-	-	-	-	2	2	2	2	2	2	2	2

**NOTES:**

- 1) Maximum 102" building height
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- 3) Any required anchors between corners shall be spaced equidistant apart from each other.
- 4) Number of anchors required per side shall be determined by finding quantities listed in columns.

For example: 12' x 18' Building

Looking in 12' column - Use lowest value in 12' column for number of anchors = 2

Looking in 18' column - find the corresponding width of 12' to obtain number of anchors for 18' side = 2  
 if building width exceeds the widths shown in the Building Width column, use lowest number of anchors in corresponding Building Length column.

- 5) Anchors at corners shall be included in the quantity required for each side or face of building.
- 6) In some cases where anchor quantity is not indicated, a deeper anchor will need to be used due to otherwise too close of spacing of anchors.



# TIE DOWN ENGINEERING, INC.

Wind Zone: 2

Anchor Description: 3/4" x 42" Eye Anchor w/ 4" Helix  
 Model Number: 59052

Building Width (ft.)	Building Length (ft.)														
	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32
5	2	2	2	2	2	3	3	3	4	4	4	4	5	5	5
6	-	2	2	2	2	2	3	3	3	4	4	4	4	5	5
7	-	-	2	2	2	2	3	3	3	3	4	4	4	4	5
8	-	-	2	2	2	2	2	3	3	3	3	4	4	4	4
10	-	-	-	2	2	2	2	3	3	3	3	4	4	4	4
12	-	-	-	-	2	2	2	3	3	3	3	4	4	4	4
14	-	-	-	-	-	2	2	3	3	3	3	4	4	4	4
16	-	-	-	-	-	-	-	3	3	3	4	4	4	4	5
18	-	-	-	-	-	-	-	-	3	3	4	4	4	5	5



**NOTES:**

- 1) Maximum 102" building height
- 2) One anchor shall be placed at each corner of building.
- 3) Any required anchors between corners shall be spaced equidistant apart from each other.
- 4) Number of anchors required per side shall be determined by finding quantities listed in columns.

For example: 12' x 18' Building

Looking in 12' column - Use lowest value in 12' column for number of anchors = 2

Looking in 18' column - find the corresponding width of 12' to obtain number of anchors for 18' side = 3  
 If building width exceeds the widths shown in the Building Width column, use lowest number of anchors in corresponding Building Length column.

- 5) Anchors at corners shall be included in the quantity required for each side or face of building.
- 6) In some cases where anchor quantity is not indicated, a deeper anchor will need to be used due to otherwise too close of spacing of anchors.



# TIE DOWN ENGINEERING, INC.

Wind Zone: 3

Anchor Description: 3/4" x 42" Eye Anchor w/ 4" Helix  
 Model Number: 59052

Building Width (ft.)	Building Length (ft.)															
	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32	
5	2	2	2	2	3	3	3	4	4	5	5	5	6	6	6	
6	-	2	2	2	2	3	3	3	4	4	4	5	5	5	6	
7	-	-	2	2	2	3	3	3	4	4	4	5	5	5	5	
8	-	-	2	2	2	3	3	3	3	4	4	4	5	5	5	
10	-	-	-	2	2	2	3	3	3	4	4	4	4	5	5	
12	-	-	-	-	2	2	3	3	3	4	4	4	4	5	5	
14	-	-	-	-	-	3	3	3	3	4	4	4	5	5	5	
16	-	-	-	-	-	-	3	3	4	4	4	4	5	5	5	
18	-	-	-	-	-	-	-	3	4	4	4	4	5	5	6	

**NOTES:**

- 1) Maximum 102" building height
- 2) One anchor shall be placed at each corner of building.
- 3) Any required anchors between corners shall be spaced equidistant apart from each other.
- 4) Number of anchors required per side shall be determined by finding quantities listed in columns.  
  
 For example:    12' x 18' Building  
 Looking in 12' column - Use lowest value in 12' column for number of anchors =    2  
 Looking in 18' column - find the corresponding width of 12' to obtain number of anchors for 18' side =    3  
 If building width exceeds the widths shown in the Building Width column, use lowest number of anchors in corresponding Building Length column.
- 5) Anchors at corners shall be included in the quantity required for each side or face of building.
- 6) In some cases where anchor quantity is not indicated, a deeper anchor will need to be used due to otherwise too close of spacing of anchors.



## TIE DOWN ENGINEERING, INC.

Wind Zone: 1

Anchor Description: 1/2" x 15" Eye Anchor with 4" Helix  
 Model Number: 59050

Building Width (ft.)	Building Length (ft.)														
	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32
5	2	2	2	3	3	4	4	5	5	6	6	7	7	8	8
6	-	2	2	3	3	4	4	5	5	6	6	7	7	7	8
7	-	2	2	3	3	4	4	5	5	6	6	6	7	7	8
8	-	-	2	3	3	4	4	5	5	6	6	6	7	7	8
10	-	-	-	3	3	4	4	5	5	6	6	7	7	8	8
12	-	-	-	-	4	4	5	5	6	6	7	7	8	8	9
14	-	-	-	-	-	4	5	6	6	7	7	8	8	9	10
16	-	-	-	-	-	-	5	6	7	7	8	8	9	10	10
18	-	-	-	-	-	-	-	6	7	8	8	9	10	10	11

**NOTES:**

- 1) Maximum 102" building height
- 2) One anchor shall be placed at each corner of building.
- 3) Any required anchors between corners shall be spaced equidistant apart from each other.
- 4) Number of anchors required per side shall be determined by finding quantities listed in columns.

For example: 12' x 18' Building

Looking in 12' column - Use lowest value in 12' column for number of anchors = 4

Looking in 18' column - find the corresponding width of 12' to obtain number of anchors for 18' side = 5  
 If building width exceeds the widths shown in the Building Width column, use lowest number of anchors in corresponding Building Length column.

- 5) Anchors at corners shall be included in the quantity required for each side of face of building.



## TIE DOWN ENGINEERING, INC.

Wind Zone: 2

Anchor Description: 1/2" x 15" Eye Anchor with 4" Helix  
 Model Number: 59050

Building Width (ft.)	Building Length (ft.)															
	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32	
5	5	6	7	9	11	13	14	16	18	19	21	23	25	26	28	
6	-	5	7	8	10	11	13	14	16	18	19	21	22	24	25	
7	-	5	6	8	9	11	12	13	15	16	18	19	21	22	24	
8	-	-	6	7	9	10	12	13	14	16	17	18	20	21	23	
10	-	-	-	7	8	10	11	12	14	15	16	18	19	20	22	
12	-	-	-	-	8	10	11	12	14	15	16	18	19	20	22	
14	-	-	-	-	-	10	11	13	14	16	17	18	20	21	22	
16	-	-	-	-	-	-	12	13	15	16	18	19	21	22	23	
18	-	-	-	-	-	-	-	14	16	17	19	20	22	23	25	



**NOTES:**

- 1) Maximum 102" building height
- 2) One anchor shall be placed at each corner of building.
- 3) Any required anchors between corners shall be spaced equidistant apart from each other.
- 4) Number of anchors required per side shall be determined by finding quantities listed in columns.

For example: 12' x 18' Building

Looking in 12' column - Use lowest value in 12' column for number of anchors = 8

Looking in 18' column - find the corresponding width of 12' to obtain number of anchors for 18' side = 12  
 If building width exceeds the widths shown in the Building Width column, use lowest number of anchors in corresponding Building Length column.

5) Anchors at corners shall be included in the quantity required for each side or face of building.



# TIE DOWN ENGINEERING, INC.

Wind Zone: 3

Anchor Description: 1/2" x 15" Eye Anchor with 4" Helix  
 Model Number: 59050

Building Width (ft.)	Building Length (ft.)																
	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32		
5																	
6																	
7																	
8																	
10																	
12																	
14																	
16																	
18																	

**NOTES:**

- 1) Maximum 102" building height
- 2) One anchor shall be placed at each corner of building.
- 3) Any required anchors between corners shall be spaced equidistant apart from each other.
- 4) Number of anchors required per side shall be determined by finding quantities listed in columns.

For example: 12' x 18' Building

Looking in 12' column - Use lowest value in 12' column for number of anchors = 10

Looking in 18' column - find the corresponding width of 12' to obtain number of anchors for 18' side = 15  
 If building width exceeds the widths shown in the Building Width column, use lowest number of anchors in corresponding Building Length column.

- 5) Anchors at corners shall be included in the quantity required for each side or face of building.



# TIE DOWN ENGINEERING, INC.

Wind Zone: 1

Anchor Description: 3/4" x 48" Eye Anchor with 6" Helix  
 Model Number: 59045

Building Width (ft.)	Building Length (ft.)														
	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32
5	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
6	-	2	2	2	2	2	2	2	2	2	2	2	2	2	2
7	-	-	2	2	2	2	2	2	2	2	2	2	2	2	2
8	-	-	2	2	2	2	2	2	2	2	2	2	2	2	2
10	-	-	-	2	2	2	2	2	2	2	2	2	2	2	2
12	-	-	-	-	2	2	2	2	2	2	2	2	2	2	2
14	-	-	-	-	-	2	2	2	2	2	2	2	2	2	2
16	-	-	-	-	-	-	2	2	2	2	2	2	2	2	2
18	-	-	-	-	-	-	-	2	2	2	2	2	2	2	2



**NOTES:**

- 1) Maximum 102" building height
- 2) One anchor shall be placed at each corner of building.
- 3) Any required anchors between corners shall be spaced equidistant apart from each other.
- 4) Number of anchors required per side shall be determined by finding quantities listed in columns.

For example: 12' x 18' Building

Looking in 12' column - Use lowest value in 12' column for number of anchors = 2

Looking in 18' column - find the corresponding width of 12' to obtain number of anchors for 18' side = 2  
 If building width exceeds the widths shown in the Building Width column, use lowest number of anchors in corresponding Building Length column.

- 5) Anchors at corners shall be included in the quantity required for each side or face of building.
- 6) In some cases where anchor quantity is not indicated, a deeper anchor will need to be used due to otherwise too close of spacing of anchors.



# TIE DOWN ENGINEERING, INC.

Wind Zone: 2

Anchor Description: 3/4" x 48" Eye Anchor with 6" Helix  
 Model Number: 59045

Building Width (ft.)	Building Length (ft.)														
	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32
5	2	2	2	2	2	3	3	3	4	4	4	5	5	5	5
6	-	2	2	2	2	2	3	3	3	4	4	4	4	5	5
7	-	-	2	2	2	2	3	3	3	3	4	4	4	4	5
8	-	-	2	2	2	2	2	3	3	3	3	4	4	4	4
10	-	-	-	2	2	2	2	3	3	3	3	4	4	4	4
12	-	-	-	-	2	2	2	3	3	3	3	4	4	4	4
14	-	-	-	-	-	2	2	3	3	3	3	4	4	4	4
16	-	-	-	-	-	-	3	3	3	3	4	4	4	4	5
18	-	-	-	-	-	-	-	3	3	3	4	4	4	5	5



**NOTES:**

- 1) Maximum 102" building height
- 2) One anchor shall be placed at each corner of building.
- 3) Any required anchors between corners shall be spaced equidistant apart from each other.
- 4) Number of anchors required per side shall be determined by finding quantities listed in columns.

For example: 12' x 18' Building

Looking in 12' column - Use lowest value in 12' column for number of anchors = 2

Looking in 18' column - find the corresponding width of 12' to obtain number of anchors for 18' side = 3  
 If building width exceeds the widths shown in the Building Width column, use lowest number of anchors in corresponding Building Length column.

- 5) Anchors at corners shall be included in the quantity required for each side or face of building.
- 6) In some cases where anchor quantity is not indicated, a deeper anchor will need to be used due to otherwise too close of spacing of anchors.



# TIE DOWN ENGINEERING, INC.

Wind Zone: 3

Anchor Description: 3/4" x 48" Eye Anchor with 6" Helix  
 Model Number: 59045

Building Width (ft.)	Building Length (ft.)														
	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32
5	2	2	2	2	3	3	3	4	4	5	5	5	6	6	6
6	-	2	2	2	3	3	4	4	4	4	5	5	5	6	6
7	-	-	2	2	2	3	3	3	4	4	4	5	5	5	5
8	-	-	2	2	2	3	3	3	3	4	4	4	5	5	5
10	-	-	-	2	2	3	3	3	3	4	4	4	5	5	5
12	-	-	-	-	2	3	3	3	3	4	4	4	5	5	5
14	-	-	-	-	-	3	3	3	3	4	4	4	5	5	5
16	-	-	-	-	-	-	3	3	4	4	4	5	5	5	5
18	-	-	-	-	-	-	-	3	4	4	4	5	5	5	6

**NOTES:**

- 1) Maximum 102" building height
- 2) One anchor shall be placed at each corner of building.
- 3) Any required anchors between corners shall be spaced equidistant apart from each other.
- 4) Number of anchors required per side shall be determined by finding quantities listed in columns.

For example: 12' x 18' Building

Looking in 12' column - Use lowest value in 12' column for number of anchors = 2

Looking in 18' column - find the corresponding width of 12' to obtain number of anchors for 18' side = 3  
 if building width exceeds the widths shown in the Building Width column, use lowest number of anchors in corresponding Building Length column.

- 5) Anchors at corners shall be included in the quantity required for each side or face of building.
- 6) In some cases where anchor quantity is not indicated, a deeper anchor will need to be used due to otherwise too close of spacing of anchors.



# TIE DOWN ENGINEERING, INC.

Wind Zone: 1      Anchor Description: 3/4" x 60" Eye Anchor with 8" Helix  
 Model Number: 59040

Building Width (ft.)	Building Length (ft.)														
	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32
5	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3
6	-	2	2	2	2	2	2	2	2	2	2	2	2	2	2
7	-	2	2	2	2	2	2	2	2	2	2	2	2	2	2
8	-	-	2	2	2	2	2	2	2	2	2	2	2	2	2
10	-	-	-	2	2	2	2	2	2	2	2	2	2	2	3
12	-	-	-	-	2	2	2	2	2	2	2	2	2	3	3
14	-	-	-	-	-	2	2	2	2	2	2	2	3	3	3
16	-	-	-	-	-	-	2	2	2	2	2	3	3	3	3
18	-	-	-	-	-	-	-	2	2	2	3	3	3	3	3

**NOTES:**

- 1) Maximum 102" building height
- 2) One anchor shall be placed at each corner of building.
- 3) Any required anchors between corners shall be spaced equidistant apart from each other.
- 4) Number of anchors required per side shall be determined by finding quantities listed in columns.

For example:    12' x 18' Building

Looking in 12' column - Use lowest value in 12' column for number of anchors 2

Looking in 18' column - find the corresponding width of 12' to obtain number of anchors for 18' side  
 If building width exceeds the widths shown in the Building Width column, use lowest number of anchors in corresponding Building Length column.

- 5) Anchors at corners shall be included in the quantity required for each side or face of building.



## TIE DOWN ENGINEERING, INC.

Wind Zone:   2  

Anchor Description: 3/4" x 60" Eye Anchor with 8" Helix  
Model Number: 59040

Building Width (ft.)	Building Length (ft.)														
	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32
5	2	2	2	3	3	4	4	5	5	6	6	6	7	7	8
6	-	2	2	3	3	3	4	4	5	5	5	6	6	7	7
7	-	2	2	2	3	3	4	4	4	5	5	5	6	6	7
8	-	-	2	2	3	3	3	4	4	5	5	5	6	6	6
10	-	-	-	2	3	3	3	4	4	4	5	5	5	6	6
12	-	-	-	-	3	3	3	4	4	4	5	5	5	6	6
14	-	-	-	-	-	3	3	4	4	4	5	5	6	6	6
16	-	-	-	-	-	-	4	4	4	5	5	5	6	6	7
18	-	-	-	-	-	-	-	4	4	5	5	6	6	6	7

**NOTES:**

- 1) Maximum 102" building height
- 2) One anchor shall be placed at each corner of building.
- 3) Any required anchors between corners shall be spaced equidistant apart from each other.
- 4) Number of anchors required per side shall be determined by finding quantities listed in columns.

For example: 12' x 18' Building

Looking in 12' column - Use lowest value in 12' column for number of anchors 3

Looking in 18' column - find the corresponding width of 12' to obtain number of anchors for 18' side  
If building width exceeds the widths shown in the Building Width column, use lowest number of anchors in corresponding Building Length column.

- 5) Anchors at corners shall be included in the quantity required for each side of face of building.



## TIE DOWN ENGINEERING, INC.

Wind Zone: 3

Anchor Description: 3/4" x 60" Eye Anchor with 8" Helix  
Model Number: 59040

Building Width (ft.)	Building Length (ft.)														
	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32
5	2	2	3	3	4	4	5	5	6	7	7	8	8	9	9
6	-	2	2	3	3	4	4	5	5	6	6	7	7	8	8
7	-	2	2	3	3	4	4	5	5	6	6	6	7	7	8
8	-	-	2	3	3	4	4	4	5	5	6	6	7	7	8
10	-	-	-	3	3	3	4	4	5	5	6	6	6	7	7
12	-	-	-	-	3	3	4	4	5	5	6	6	6	7	7
14	-	-	-	-	-	4	4	4	5	5	6	6	7	7	7
16	-	-	-	-	-	-	4	5	5	6	6	6	7	7	8
18	-	-	-	-	-	-	-	5	5	6	6	7	7	8	8



**NOTES:**

- 1) Maximum 102" building height
- 2) One anchor shall be placed at each corner of building.
- 3) Any required anchors between corners shall be spaced equidistant apart from each other.
- 4) Number of anchors required per side shall be determined by finding quantities listed in columns.

For example: 12' x 18' Building

Looking in 12' column - Use lowest value in 12' column for number of anchors = 3

Looking in 18' column - find the corresponding width of 12' to obtain number of anchors for 18' side = 4  
If building width exceeds the widths shown in the Building Width column, use lowest number of anchors in corresponding Building Length column.

- 5) Anchors at corners shall be included in the quantity required for each side or face of building.

