Clutcher Hanging System Construction Standards
Ductmate Industries

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Summary

These construction standards are intended to provide HVAC design engineers, architects, and contractors with the proper guidance needed to safely use Ductmate's Clutcher and Clutcher Cable hanging system.

Properly sized and spaced, Ductmate Clutchers and Clutcher Cable provide a safe, cost effective hanging solution that is quick to install.

When designing a HVAC duct hanging system there are multiple aspects to consider:

- Environmental and Load Considerations
- Hanging Configuration
- Size Selection
- Attachment Method

1. Environmental and Load Considerations

Ductmate's Clutcher and Clutcher Cable hanging system is designed for typical indoor environments and static loads.

The following conditions are not permitted:

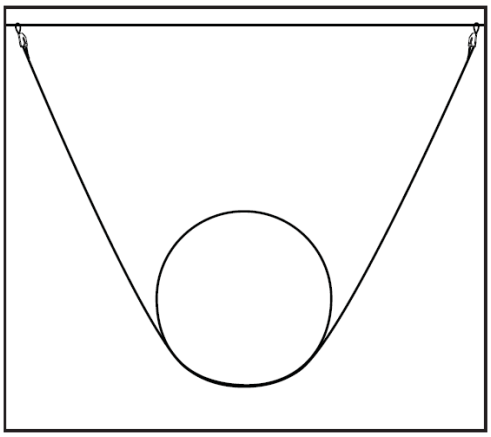
- Corrosive environments, such as
  - Indoor swimming pool facilities
  - Spa areas
- Dynamic loads, such as
  - Pumps
  - Compressors

Clutchers must not be used for lifting objects. Clutchers are designed specifically for supporting static loads such as HVAC ductwork.

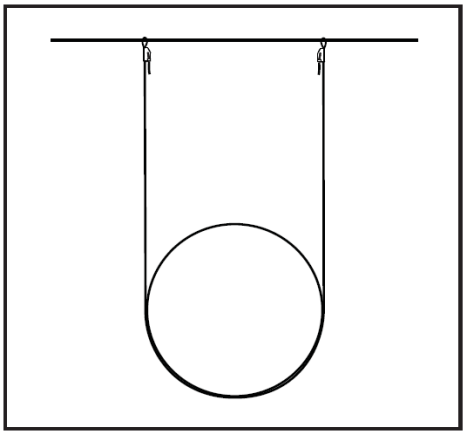
2. Hanging Configurations

There are four approved hanging configurations for the Clutchers and Clutcher Cable for oval and round duct:

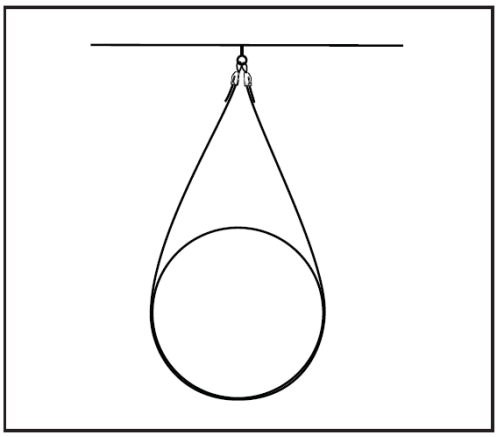
A. Spread Horseshoe (Preferred)



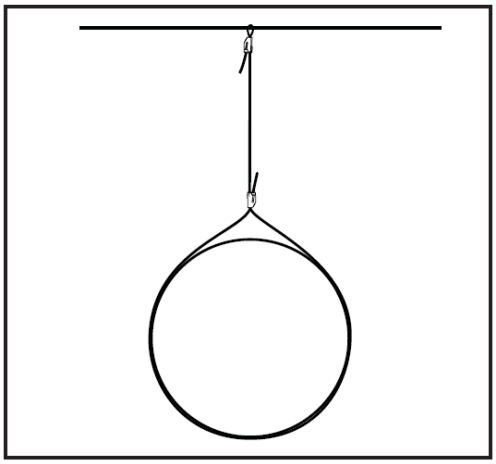
B. Standard Horseshoe
Round Duct/Oval Duct



C. Single Point Saddle

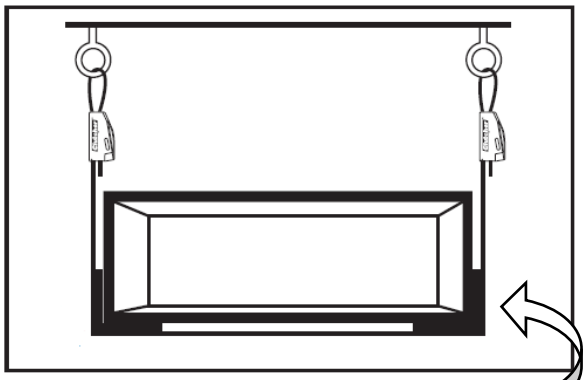


D. Loop



18” Diameter Maximum
Round Only

E. Rectangular Duct
Standard and Spread Horseshoe Only



Part No. HFCCS Required

Duct Stability

Potential motion of the duct system must be considered when deciding on which type of hanging configuration to use. Repeated motion may cause ductwork to flex and could lead to fatigue failure.

Movement can be introduced into the system from sources such as:

- Air handler motion
- Air exiting register grilles on one side of duct only
- External impact forces

The geometry of the duct system greatly affects the potential for motion. Long straight duct runs securely fixed at only one end are most likely to move. If unrestrained, the free end of the duct may oscillate. Most vertical hanging systems (including threaded rod and strapping) without lateral support will permit lateral motion and allow oscillation. If movement in the system is a concern, the Spread Horseshoe Hanging Configuration or supplemental lateral support must be used to reduce the amount of movement that may exist.

	Round Duct	Oval Duct	Rectangular Duct	Sloped Structures	Stability	Load Capacity
Standard Horseshoe	Yes	Yes	Yes	No	Good	Maximum
Single Point Saddle	Yes	Yes	No	Yes	Minimum	Maximum
Spread Horseshoe	Yes	Yes	Yes	No	Maximum	Good
Loop	Less than 18" dia. only	Less than 18" dia. only	No	Yes	Minimum	Minimum

3. Size Selection

When selecting a Clutcher Cable and Clutcher size, the following must be considered:

- Total weight of the duct (duct dimensions, metal gauge, single wall, double wall, fittings…)
- Hanger spacing
- Hanging configuration

Ductmate Clutchers and Clutcher Cable are offered in three sizes each. Only the proper size Clutcher/Clutcher Cable combinations may be used.

Clutcher Cable	Clutcher	Capacity
WR10	CL10	125 lbs.
WR20	CL20	250 lbs.
WR30	CL30	650 lbs.

Experienced Sheet Metal Workers and Engineers will know how to calculate the total weight of the duct system segments and then properly select the appropriate hanging configuration, Clutcher Cable/Clutcher size, and hanger spacing. The charts in Appendix A and Appendix B are provided as a quick reference and alternative to the calculation.

Steps:

1. Select a Hanger Spacing based upon available structure attachment points.
    - Typical Hanger spacing is between 5 feet and 12 feet.
    - Less than 5 foot spacing can be difficult to install so that all hangers are carrying the proper load.
    - Greater than 12 foot spacing is not permitted by SMACNA. The ductwork may not be able to support its own weight in excess of 12 foot spacing.

2. Select a Hanging Configuration (as described in Section 2)
    - Standard Horseshoe
    - Single Point Saddle
    - Spread Horseshoe
    - Loop

3. Select the appropriate chart in Appendix A (Round Duct) or Appendix B (Rectangular Duct) based upon the duct type and hanging configuration.

4. Select the appropriate Clutcher/Clutcher Cable size with the selected chart based upon hanger spacing and size of the largest duct in the system.
    - Round duct (spiral pipe) size is determined by the diameter of the pipe in inches.
    - Rectangular duct size is determined by adding the height and width of the duct in inches.
    - In most cases it is desirable to use the same Clutcher Cable/Clutcher size and spacing throughout the entire system.
    - Color Code indicates appropriate size Clutcher Cable/Clutcher

CL10	
CL20	
CL30	

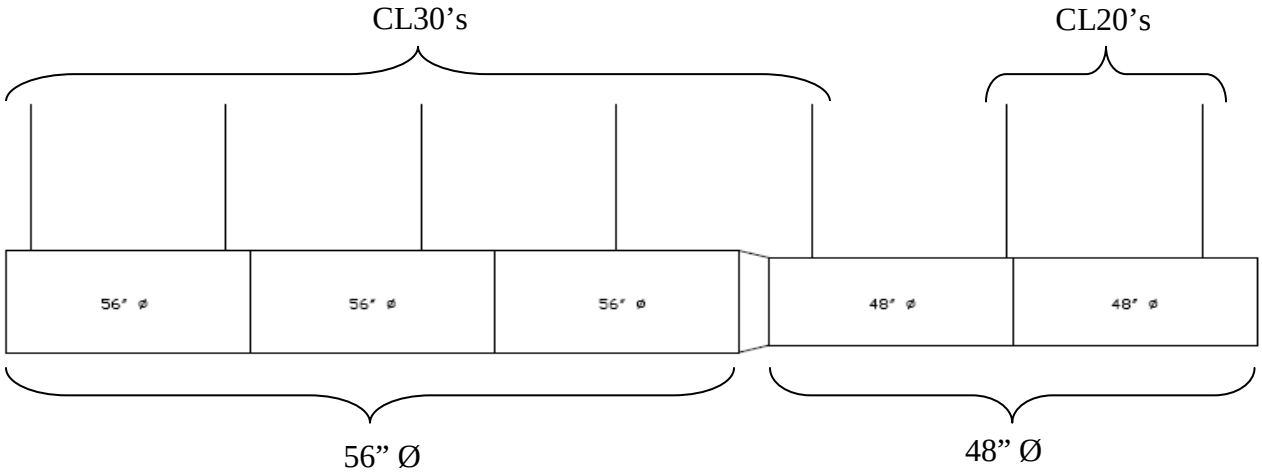
Multiple size duct sections

In systems with multiple size duct sections, the hanging system for the largest duct size can be used for the entire system. Alternately, Clutchers can be sized for each duct size provided the larger size Clutcher is used for the first hanger after the transition to the smaller size duct.

For instance, if a system has 56" diameter spiral pipe that requires a CL30's and transitions to 48" diameter spiral pipe that only requires CL20's, the following can be done.

- Use CL30's to suspend the 56"diameter pipe
- The first hanger after the transition must remain a CL30
- All remaining Clutchers thereafter can be CL20's

This logic can be used for each Clutcher size where applicable as long as the proper safety considerations are taken.



Notes about how to use the charts:

1. Weights per foot include a 15% increase over the theoretical weight to allow for manufacturing variation and simple connectors.
2. Large fittings such as elbows or Tee connectors will require the use of additional hangers.

Table of Contents - Appendix A

Round Duct Charts				
Hanging Configuration	**12 ft. Spacing**	**10 ft. Spacing**	**6 ft. Spacing**	**5 ft. Spacing**
Standard Horseshoe	Table A-1	Table A-2	Table A-3	Table A-4
Single Point Saddle	Table A-5	Table A-6	Table A-7	Table A-8
Spread Horseshoe at 15°	Table A-9	Table A-10	Table A-11	Table A-12
Spread Horseshoe at 30°	Table A-13	Table A-14	Table A-15	Table A-16
Spread Horseshoe at 45°	Table A-17	Table A-18	Table A-19	Table A-20
Spread Horseshoe at 60°	Table A-21	Table A-22	Table A-23	Table A-24
Loop	Table A-25	Table A-26	Table A-27	Table A-28

Table of Contents - Appendix B

Rectangular Duct Charts				
Hanging Configuration	**12 ft. Spacing**	**10 ft. Spacing**	**6 ft. Spacing**	**5 ft. Spacing**
Standard Horseshoe	Table B-1	Table B-2	Table B-3	Table B-4
Spread Horseshoe at 15°	Table B-5	Table B-6	Table B-7	Table B-8
Spread Horseshoe at 30°	Table B-9	Table B-10	Table B-11	Table B-12
Spread Horseshoe at 45°	Table B-13	Table B-14	Table B-15	Table B-16
Spread Horseshoe at 60°	Table B-17	Table B-18	Table B-19	Table B-20

4. Attachment to the Structure

The load carrying capacity of the hanging system is only as great as the weakest link. The design of the connection between the structure and the Clutcher/Clutcher Cable system is critical.

There are several ways to connect the Clutcher Cable to the structure:

- Loop the cable around a part of the structure.
- Use a connecting piece of hardware such as an eye bolt as shown in Section 5.

In either case, it is the responsibility of the installer to ensure that the structure and connecting hardware if used, is rated to support the load.

Sharp edges and Clutcher Cable bending radius

Sharp edges can wear Clutcher Cable over time and reduce its load carrying capacity. The Clutcher Cable is not permitted to touch sharp edges.
Sharp bends in the Clutcher Cable can substantially reduce its load carrying capacity.

A 3/16" radius or 3/8" diameter and smaller is considered to be sharp. If an attachment with a sharp edge is being used, a cable thimble as shown below must be hooked through the eye of the attachment. The cable must be looped around the thimble to ensure the working load limits.

Examples of attachments that create a sharp edge include:

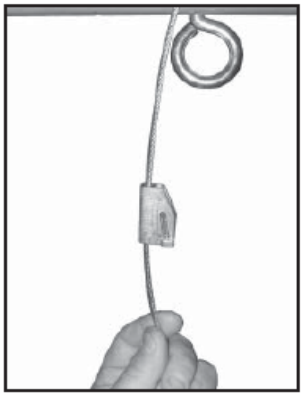
- Welded eye bolt 3/8" and smaller
- Ductmate HangerMate components
- Hole drilled into beam or purlin
- Wood/concrete/steel anchors with eyelet

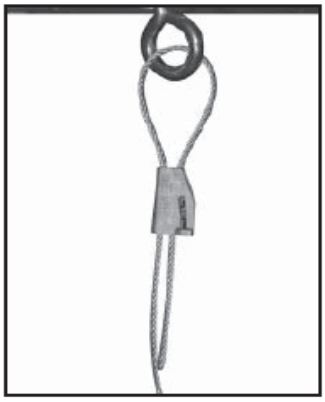
5. **Construction Notes**

Using the Clutcher

To maintain the static working load, the following steps must be taken:

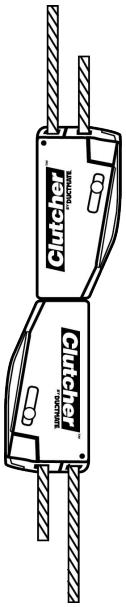
- Insert the cable through the free bore of the Clutcher
- Pass the cable around an appropriate attachment device
- Secure the cable through the locking bore of the Clutcher
- Pull the Clutcher Cable taught and ensure that the locking wedge has securely engaged the Clutcher Cable
- Ensure that there is at least 3” of cable protruding from the casting through the locking wedge





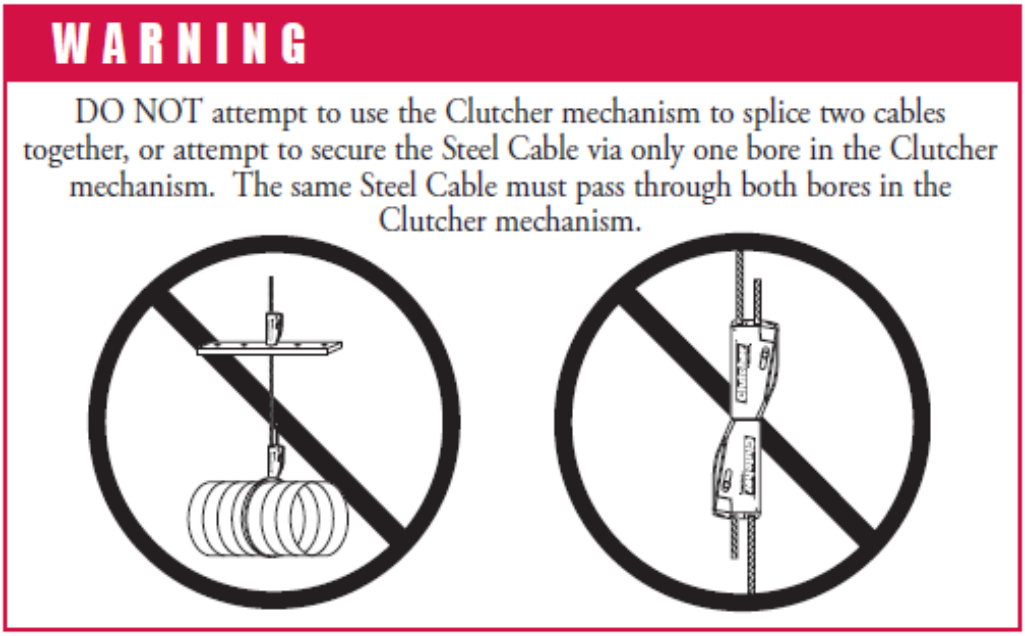
Splicing

Clutchers are also not allowed to be spliced together as shown in the figure below. Doing so dramatically decreases the working load limit the Clutchers.



Single Bore Use

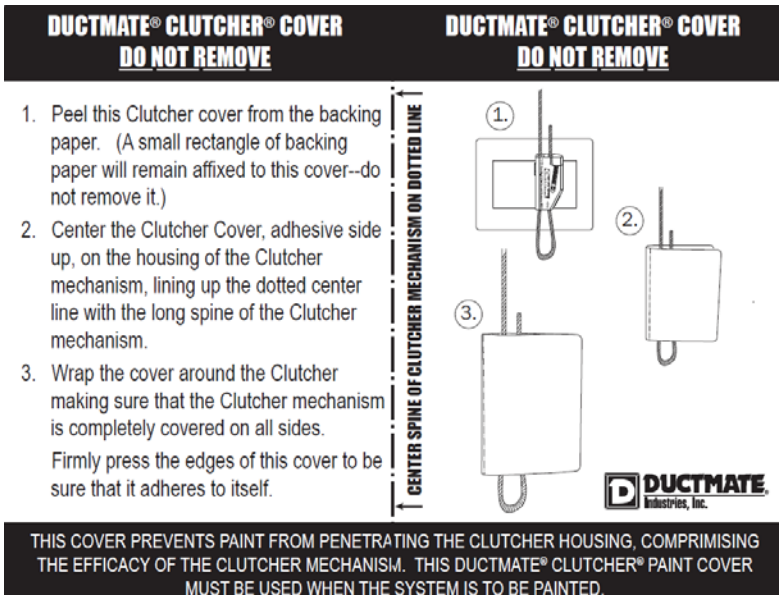
The Clutcher/Clutcher Cable system derives some of its load carrying ability from the friction created by wrapping the Clutcher Cable around the attachment point or load. Attempting to support a load by passing the Clutcher Cable through only the locking bore of the Clutcher will result in a significantly lower holding capacity. The practice is not permitted.



Paints and Lubricants

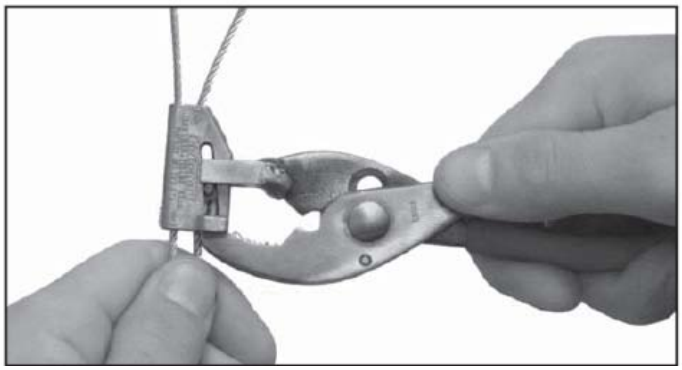
Foreign products such as paints and lubricants may have adverse effects on the performance of the Clutchers. Paints and Lubricants must not be applied to the Clutcher or Clutcher Cable.

The Clutcher paint cover should be used if the Clutchers and/or Clutcher Cable are likely to be painted. Properly installed, the paint cover will keep paint out of the locking mechanism. See your Ductmate distributor for complimentary paint covers.



Adjustability

If a CL10 or CL20 Clutcher needs to be adjusted, a DeClutcher tool should be used (part number CLTOOL1020). The DeClutcher tool is custom hand tool made specifically for adjusting the locking wedge on the Clutcher.



To adjust a Clutcher using the DeClutcher tool:

1. Ensure duct is fully supported by additional means such as a duct lift
2. Place the tool on the Clutcher as shown above.
3. Squeeze the handles towards each other to release the cable from the locking mechanism
4. Adjust the cable on the locking bore to the correct slack.

Cable Cutting

To ensure that a clean cut is made every time on Clutcher Cable, be sure to use Ductmate's steel cable cutters.

Ductmate Light Duty Steel Cable Cutter (HFWRC)

- HFWRC are used to cut WR10 and WR20

Ductmate Heavy Duty Steel Cable Cutter (Grainger part no. 2G996)

- 2G996 are used to cut WR30

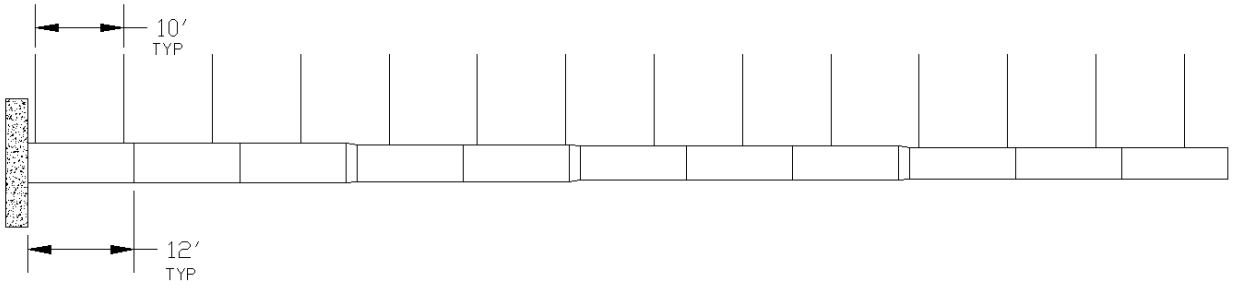
Light Duty Cable Cutter

Heavy Duty Cable Cutter

6. Examples

Sample Problem 1

A 132’ span of single wall spiral pipe consists of 4 different pipe diameters shown below (neglect reducer length). All of the pipe sections are made from 22 gauge galvanized steel and each section is 12’ long. There are beams located above the duct spaced every 10’. The beams run perpindicular to the duct along it’s entire span and do not have sharp edges. Registers are spaced evenly on both sides of the duct.



Solution

What type of environment will the hanger be present?

The duct will not be exposed to corrosive materials or dynamic loading.

What is the largest size and gauge of spiral pipe being suspended?

54 “OD and 22 gauge spiral pipe

What will the hanger spacing in the system be?

The hangers will be suspended from the perpendicular beams that are spaced every 10’.

Which hanging configuration best meets our design?

Standard Horseshoe Method can be used to suspend the duct since there are beams directly above the duct and motion is not an issue.

At what angle will the cable be suspended in relation to the duct?

The cable will be 90° to the duct since the Standard Horseshoe Method will be used. Angle is not a concern.

Find the correct table from Appendix A (Round Duct) based off of the above information

Table A-2; Standard Horseshoe Hanging Configuration – 10’ Hanger Spacing

Spiral Pipe - Clutcher Size Calculation Chart - Table A-2						
Standard Horseshoe Hanging Configuration - 10' Hanger Spacing						
Diameter (Inches)	Approx. Single Wall Spiral Pipe Weight/Lbs. per Linear Foot					
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	16 gauge
3	0.76	1.01	1.23	1.48		
4	1.02	1.35	1.64	1.94		
5	1.28	1.69	2.06	2.42		
6	1.54	2.03	2.47	2.91	3.88	4.76
7	1.79	2.37	2.88	3.40	4.52	5.58
8	2.05	2.71	3.29	3.86	5.17	6.34
9	2.31	3.05	3.71	4.37	5.82	7.18
10	2.57	3.39	4.12	4.86	6.47	7.92
11	2.82	3.73	4.54	5.34	7.11	8.72
12	3.08	4.07	4.95	5.83	7.75	9.54
13	3.34	4.41	5.36	6.32	8.48	10.31
14	3.59	4.74	5.77	6.81	9.05	11.05
15	3.84	5.08	6.18	7.28	9.70	11.80
16	4.11	5.42	6.60	7.78	10.34	12.65
17	4.36	5.77	7.02	8.25	11.08	13.47
18	4.63	6.10	7.43	8.76	11.64	14.32
19	4.89	6.44	7.84	9.25	12.29	15.09
20	5.15	6.78	8.25	9.73	12.93	15.85
22	5.65	7.46	9.08	10.71	14.23	17.50
24	6.16	8.14	9.91	11.68	15.52	19.00
26	6.67	8.82	10.73	12.66	16.82	20.70
28	7.18	9.50	11.56	13.63	18.11	22.20
30	7.71	10.18	12.38	14.60	19.41	23.90
32	8.22	10.84	13.21	15.58	20.71	25.50
34	8.72	11.54	14.04	16.51	21.97	27.08
36	9.27	12.20	14.90	17.53	23.29	28.80
38	9.73	12.88	15.67	18.46	24.51	30.26
40	10.30	13.56	16.50	19.48	25.88	31.75
42	10.77	14.25	17.32	20.40	27.21	33.47
44	11.35	14.91	18.16	21.42	28.47	35.00
46	11.86	15.59	18.99	22.39	29.77	36.65
48	12.36	16.26	19.82	23.36	31.06	38.30
50	12.88	16.69	20.63	24.33	32.37	39.94
52	13.39	17.12	21.44	25.30	33.68	41.58
54	13.91	18.05	22.26	26.28	34.98	43.18
56	14.42	18.98	23.08	27.25	36.27	44.78
58	14.94	19.65	23.91	28.23	37.56	46.38
60	15.45	20.34	24.73	29.20	38.84	47.97

Using the color coded table, determine the correct Clutcher size to be used to suspend the spiral pipe.

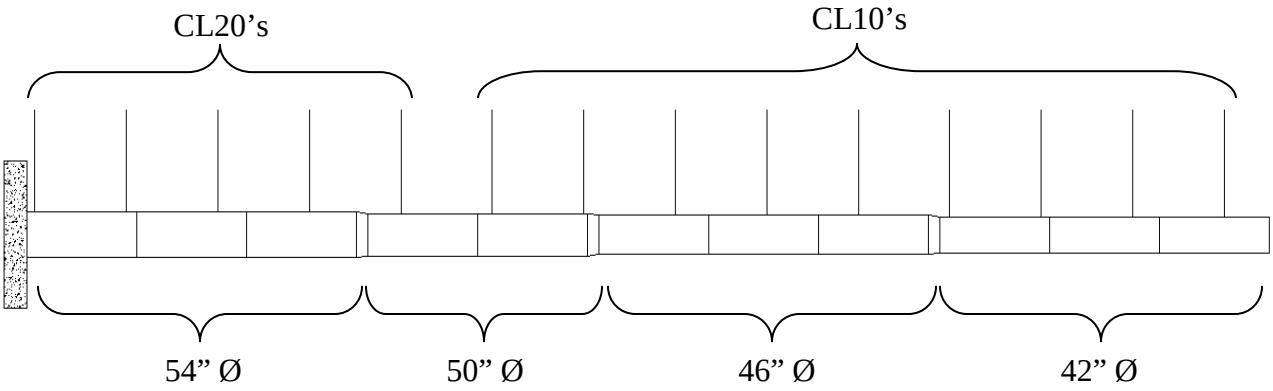
Green indicates that CL20's with W20 Clutcher Cable can be used to suspend the entire span of ductwork.

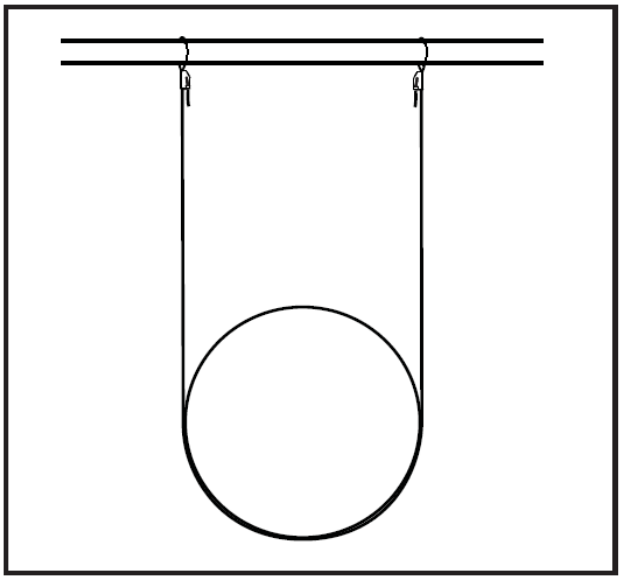
Finally, determine which type of attachment method will be used?

Since the beams do not have sharp edges the Clutcher Cable can be looped around them and secured with a Clutcher.

If one looks closely at the above table, he or she will notice that a duct diameter of 52" or smaller for our specified application only calls for a CL10. Instead of using CL20's for the entire duct run, CL10's can be used for the last 9 hangers if desired (Described on page 7).

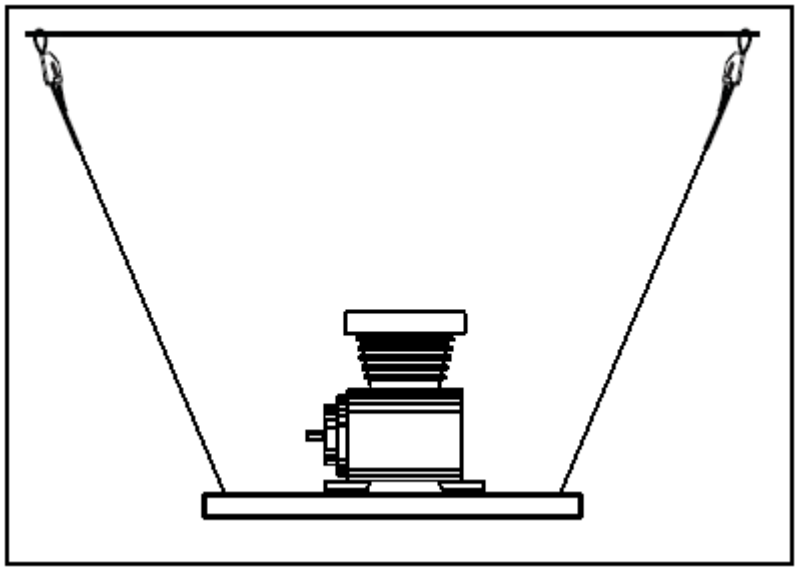
Selected Hanging Configuration





Sample Problem 2

A gas powered air compressor is to be suspended from an I beam with welded eyebolts. The hangers will be used at a 30° angle to minimize lateral movement. The platform is 4’ x 4’ with a hanger at each corner. The compressors weight is 500lbs and it operates at 2500rpm.



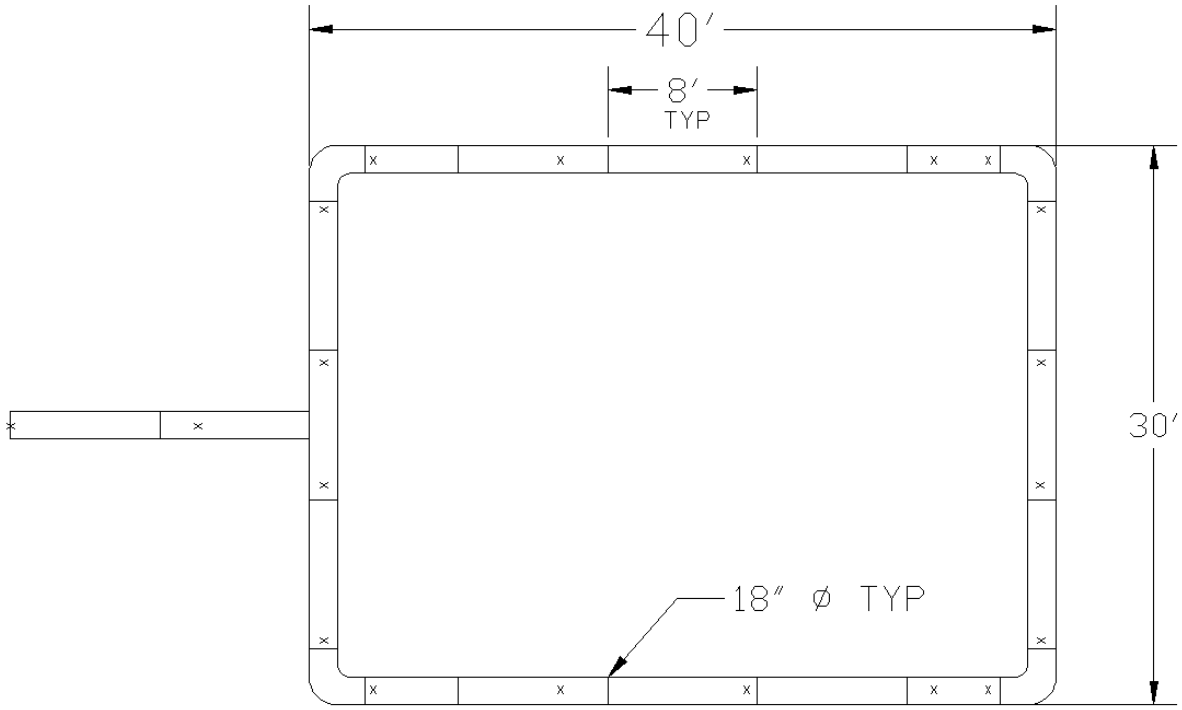
Solution

First we must consider the environment in which the hanger will be present.

The hanger would be supporting a dynamic load transferred through the platform from the compressor. This system should not be suspended with Clutchers and Clutcher Cable because excessive vibration in the system will be present. See section 1.0 Environmental and Load Consideration in the Clutcher Hanging System Construction Standards.

Sample Problem 3

A section of duct made from single wall spiral pipe exists as shown below. All of the sections of pipe are 24 gauge and are 8' long. There are wooden trusses running parallel to the 2 trunk sections of duct shown below. The trusses are spaced 2' on center. Clutchers are to be placed every 10' to support the section. The X's shown in the picture reprsent where a Clutcher is to be placed.



Solution

What type of environment will the hanger be present?

The duct will not be exposed to corrosive materials or dynamic loading.

What is the largest size and gauge of spiral pipe being suspended?

18 "OD and 24 gauge spiral pipe

What will the hanger spacing in the system be?

The hangers will be suspended from the wooden trusses and spaced every 10'.

Which hanging configuration best meets our design?

Since the trusses are running parallel to most of the individual pipe sections, the Single Point Saddle Hanging Method should be used.

Which type of attachment point the cable is to be looped through?

Since the Single Point Saddle Hanging Method is being used, eye bolts can be secured to the wooden trusses. The cable would then be looped through the eye bolts and secured with Clutchers.

Find the correct table from Appendix A (Round Duct) based off of the above information

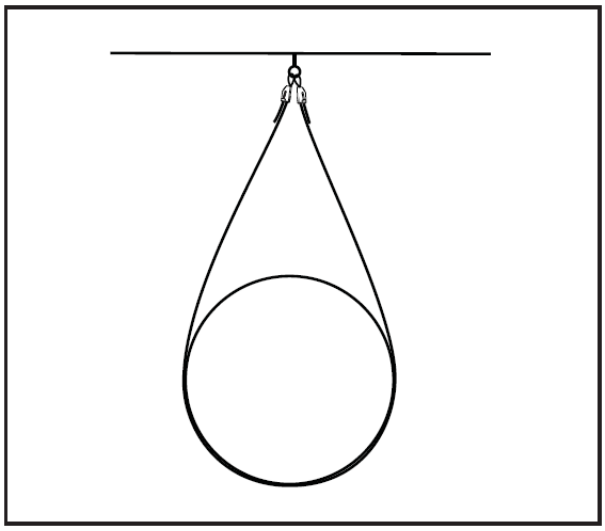
Table A-6; Single Point Saddle Hanging Configuration – 10’ Hanger Spacing

Spiral Pipe - Clutcher Size Calculation Chart - Table A-6						
Single Point Saddle Hanging Configuration - 10' Hanger Spacing						
Diameter (Inches)	Approx. Single Wall Spiral Pipe Weight/Lbs. per Linear Foot					
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	16 gauge
3	0.76	1.01	1.23	1.48		
4	1.02	1.35	1.64	1.94		
5	1.28	1.69	2.06	2.42		
6	1.54	2.03	2.47	2.91	3.88	4.76
7	1.79	2.37	2.88	3.40	4.52	5.58
8	2.05	2.71	3.29	3.86	5.17	6.34
9	2.31	3.05	3.71	4.37	5.82	7.18
10	2.57	3.39	4.12	4.86	6.47	7.92
11	2.82	3.73	4.54	5.34	7.11	8.72
12	3.08	4.07	4.95	5.83	7.75	9.54
13	3.34	4.41	5.36	6.32	8.48	10.31
14	3.59	4.74	5.77	6.81	9.05	11.05
15	3.84	5.08	6.18	7.28	9.70	11.80
16	4.11	5.42	6.60	7.78	10.34	12.65
17	4.36	5.77	7.02	8.25	11.08	13.47
18	4.63	6.10	7.43	8.76	11.64	14.32
19	4.89	6.44	7.84	9.25	12.29	15.09
20	5.15	6.78	8.25	9.73	12.93	15.85
22	5.65	7.46	9.08	10.71	14.23	17.50
24	6.16	8.14	9.91	11.68	15.52	19.00
26	6.67	8.82	10.73	12.66	16.82	20.70
28	7.18	9.50	11.56	13.63	18.11	22.20
30	7.71	10.18	12.38	14.60	19.41	23.90
32	8.22	10.84	13.21	15.58	20.71	25.50
34	8.72	11.54	14.04	16.51	21.97	27.08
36	9.27	12.20	14.90	17.53	23.29	28.80
38	9.73	12.88	15.67	18.46	24.51	30.26
40	10.30	13.56	16.50	19.48	25.88	31.75
42	10.77	14.25	17.32	20.40	27.21	33.47
44	11.35	14.91	18.16	21.42	28.47	35.00
46	11.86	15.59	18.99	22.39	29.77	36.65
48	12.36	16.26	19.82	23.36	31.06	38.30
50	12.88	16.69	20.63	24.33	32.37	39.94
52	13.39	17.12	21.44	25.30	33.68	41.58
54	13.91	18.05	22.26	26.28	34.98	43.18
56	14.42	18.98	23.08	27.25	36.27	44.78
58	14.94	19.65	23.91	28.23	37.56	46.38
60	15.45	20.34	24.73	29.20	38.84	47.97

Using the color coded table, determine the correct Clutcher size to be used to suspend the spiral pipe.

Yellow indicates that CL10's should be used to suspend the entire span of ductwork.

Selected Hanging Configuration



Appendix A

Round Duct (Spiral Pipe)

Round Duct Charts				
Hanging Configuration	**12 ft. Spacing**	**10 ft. Spacing**	**6 ft. Spacing**	**5 ft. Spacing**
Standard Horseshoe	Table A-1	Table A-2	Table A-3	Table A-4
Single Point Saddle	Table A-5	Table A-6	Table A-7	Table A-8
Spread Horseshoe at 15°	Table A-9	Table A-10	Table A-11	Table A-12
Spread Horseshoe at 30°	Table A-13	Table A-14	Table A-15	Table A-16
Spread Horseshoe at 45°	Table A-17	Table A-18	Table A-19	Table A-20
Spread Horseshoe at 60°	Table A-21	Table A-22	Table A-23	Table A-24
Loop	Table A-25	Table A-26	Table A-27	Table A-28

Spiral Pipe - Clutcher Size Calculation Chart - Table A-1						
Standard Horseshoe Hanging Configuration - 12' Hanger Spacing						
Diameter (Inches)	Approx. Single Wall Spiral Pipe Weight/Lbs. per Linear Foot					
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	16 gauge
3	0.76	1.01	1.23	1.48		
4	1.02	1.35	1.64	1.94		
5	1.28	1.69	2.06	2.42		
6	1.54	2.03	2.47	2.91	3.88	4.76
7	1.79	2.37	2.88	3.40	4.52	5.58
8	2.05	2.71	3.29	3.86	5.17	6.34
9	2.31	3.05	3.71	4.37	5.82	7.18
10	2.57	3.39	4.12	4.86	6.47	7.92
11	2.82	3.73	4.54	5.34	7.11	8.72
12	3.08	4.07	4.95	5.83	7.75	9.54
13	3.34	4.41	5.36	6.32	8.48	10.31
14	3.59	4.74	5.77	6.81	9.05	11.05
15	3.84	5.08	6.18	7.28	9.70	11.80
16	4.11	5.42	6.60	7.78	10.34	12.65
17	4.36	5.77	7.02	8.25	11.08	13.47
18	4.63	6.10	7.43	8.76	11.64	14.32
19	4.89	6.44	7.84	9.25	12.29	15.09
20	5.15	6.78	8.25	9.73	12.93	15.85
22	5.65	7.46	9.08	10.71	14.23	17.50
24	6.16	8.14	9.91	11.68	15.52	19.00
26	6.67	8.82	10.73	12.66	16.82	20.70
28	7.18	9.50	11.56	13.63	18.11	22.20
30	7.71	10.18	12.38	14.60	19.41	23.90
32	8.22	10.84	13.21	15.58	20.71	25.50
34	8.72	11.54	14.04	16.51	21.97	27.08
36	9.27	12.20	14.90	17.53	23.29	28.80
38	9.73	12.88	15.67	18.46	24.51	30.26
40	10.30	13.56	16.50	19.48	25.88	31.75
42	10.77	14.25	17.32	20.40	27.21	33.47
44	11.35	14.91	18.16	21.42	28.47	35.00
46	11.86	15.59	18.99	22.39	29.77	36.65
48	12.36	16.26	19.82	23.36	31.06	38.30
50	12.88	16.69	20.63	24.33	32.37	39.94
52	13.39	17.12	21.44	25.30	33.68	41.58
54	13.91	18.05	22.26	26.28	34.98	43.18
56	14.42	18.98	23.08	27.25	36.27	44.78
58	14.94	19.65	23.91	28.23	37.56	46.38
60	15.45	20.34	24.73	29.20	38.84	47.97

Spiral Pipe - Clutcher Size Calculation Chart - Table A-2						
Standard Horseshoe Hanging Configuration - 10' Hanger Spacing						
Diameter (Inches)	Approx. Single Wall Spiral Pipe Weight/Lbs. per Linear Foot					
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	16 gauge
3	0.76	1.01	1.23	1.48		
4	1.02	1.35	1.64	1.94		
5	1.28	1.69	2.06	2.42		
6	1.54	2.03	2.47	2.91	3.88	4.76
7	1.79	2.37	2.88	3.40	4.52	5.58
8	2.05	2.71	3.29	3.86	5.17	6.34
9	2.31	3.05	3.71	4.37	5.82	7.18
10	2.57	3.39	4.12	4.86	6.47	7.92
11	2.82	3.73	4.54	5.34	7.11	8.72
12	3.08	4.07	4.95	5.83	7.75	9.54
13	3.34	4.41	5.36	6.32	8.48	10.31
14	3.59	4.74	5.77	6.81	9.05	11.05
15	3.84	5.08	6.18	7.28	9.70	11.80
16	4.11	5.42	6.60	7.78	10.34	12.65
17	4.36	5.77	7.02	8.25	11.08	13.47
18	4.63	6.10	7.43	8.76	11.64	14.32
19	4.89	6.44	7.84	9.25	12.29	15.09
20	5.15	6.78	8.25	9.73	12.93	15.85
22	5.65	7.46	9.08	10.71	14.23	17.50
24	6.16	8.14	9.91	11.68	15.52	19.00
26	6.67	8.82	10.73	12.66	16.82	20.70
28	7.18	9.50	11.56	13.63	18.11	22.20
30	7.71	10.18	12.38	14.60	19.41	23.90
32	8.22	10.84	13.21	15.58	20.71	25.50
34	8.72	11.54	14.04	16.51	21.97	27.08
36	9.27	12.20	14.90	17.53	23.29	28.80
38	9.73	12.88	15.67	18.46	24.51	30.26
40	10.30	13.56	16.50	19.48	25.88	31.75
42	10.77	14.25	17.32	20.40	27.21	33.47
44	11.35	14.91	18.16	21.42	28.47	35.00
46	11.86	15.59	18.99	22.39	29.77	36.65
48	12.36	16.26	19.82	23.36	31.06	38.30
50	12.88	16.69	20.63	24.33	32.37	39.94
52	13.39	17.12	21.44	25.30	33.68	41.58
54	13.91	18.05	22.26	26.28	34.98	43.18
56	14.42	18.98	23.08	27.25	36.27	44.78
58	14.94	19.65	23.91	28.23	37.56	46.38
60	15.45	20.34	24.73	29.20	38.84	47.97

Spiral Pipe - Clutcher Size Calculation Chart - Table A-3						
Standard Horseshoe Hanging Configuration - 6' Hanger Spacing						
Diameter (Inches)	Approx. Single Wall Spiral Pipe Weight/Lbs. per Linear Foot					
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	16 gauge
3	0.76	1.01	1.23	1.48		
4	1.02	1.35	1.64	1.94		
5	1.28	1.69	2.06	2.42		
6	1.54	2.03	2.47	2.91	3.88	4.76
7	1.79	2.37	2.88	3.40	4.52	5.58
8	2.05	2.71	3.29	3.86	5.17	6.34
9	2.31	3.05	3.71	4.37	5.82	7.18
10	2.57	3.39	4.12	4.86	6.47	7.92
11	2.82	3.73	4.54	5.34	7.11	8.72
12	3.08	4.07	4.95	5.83	7.75	9.54
13	3.34	4.41	5.36	6.32	8.48	10.31
14	3.59	4.74	5.77	6.81	9.05	11.05
15	3.84	5.08	6.18	7.28	9.70	11.80
16	4.11	5.42	6.60	7.78	10.34	12.65
17	4.36	5.77	7.02	8.25	11.08	13.47
18	4.63	6.10	7.43	8.76	11.64	14.32
19	4.89	6.44	7.84	9.25	12.29	15.09
20	5.15	6.78	8.25	9.73	12.93	15.85
22	5.65	7.46	9.08	10.71	14.23	17.50
24	6.16	8.14	9.91	11.68	15.52	19.00
26	6.67	8.82	10.73	12.66	16.82	20.70
28	7.18	9.50	11.56	13.63	18.11	22.20
30	7.71	10.18	12.38	14.60	19.41	23.90
32	8.22	10.84	13.21	15.58	20.71	25.50
34	8.72	11.54	14.04	16.51	21.97	27.08
36	9.27	12.20	14.90	17.53	23.29	28.80
38	9.73	12.88	15.67	18.46	24.51	30.26
40	10.30	13.56	16.50	19.48	25.88	31.75
42	10.77	14.25	17.32	20.40	27.21	33.47
44	11.35	14.91	18.16	21.42	28.47	35.00
46	11.86	15.59	18.99	22.39	29.77	36.65
48	12.36	16.26	19.82	23.36	31.06	38.30
50	12.88	16.69	20.63	24.33	32.37	39.94
52	13.39	17.12	21.44	25.30	33.68	41.58
54	13.91	18.05	22.26	26.28	34.98	43.18
56	14.42	18.98	23.08	27.25	36.27	44.78
58	14.94	19.65	23.91	28.23	37.56	46.38
60	15.45	20.34	24.73	29.20	38.84	47.97

Spiral Pipe - Clutcher Size Calculation Chart - Table A-4						
Standard Horseshoe Hanging Configuration - 5' Hanger Spacing						
Diameter (Inches)	Approx. Single Wall Spiral Pipe Weight/Lbs. per Linear Foot					
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	16 gauge
3	0.76	1.01	1.23	1.48		
4	1.02	1.35	1.64	1.94		
5	1.28	1.69	2.06	2.42		
6	1.54	2.03	2.47	2.91	3.88	4.76
7	1.79	2.37	2.88	3.40	4.52	5.58
8	2.05	2.71	3.29	3.86	5.17	6.34
9	2.31	3.05	3.71	4.37	5.82	7.18
10	2.57	3.39	4.12	4.86	6.47	7.92
11	2.82	3.73	4.54	5.34	7.11	8.72
12	3.08	4.07	4.95	5.83	7.75	9.54
13	3.34	4.41	5.36	6.32	8.48	10.31
14	3.59	4.74	5.77	6.81	9.05	11.05
15	3.84	5.08	6.18	7.28	9.70	11.80
16	4.11	5.42	6.60	7.78	10.34	12.65
17	4.36	5.77	7.02	8.25	11.08	13.47
18	4.63	6.10	7.43	8.76	11.64	14.32
19	4.89	6.44	7.84	9.25	12.29	15.09
20	5.15	6.78	8.25	9.73	12.93	15.85
22	5.65	7.46	9.08	10.71	14.23	17.50
24	6.16	8.14	9.91	11.68	15.52	19.00
26	6.67	8.82	10.73	12.66	16.82	20.70
28	7.18	9.50	11.56	13.63	18.11	22.20
30	7.71	10.18	12.38	14.60	19.41	23.90
32	8.22	10.84	13.21	15.58	20.71	25.50
34	8.72	11.54	14.04	16.51	21.97	27.08
36	9.27	12.20	14.90	17.53	23.29	28.80
38	9.73	12.88	15.67	18.46	24.51	30.26
40	10.30	13.56	16.50	19.48	25.88	31.75
42	10.77	14.25	17.32	20.40	27.21	33.47
44	11.35	14.91	18.16	21.42	28.47	35.00
46	11.86	15.59	18.99	22.39	29.77	36.65
48	12.36	16.26	19.82	23.36	31.06	38.30
50	12.88	16.69	20.63	24.33	32.37	39.94
52	13.39	17.12	21.44	25.30	33.68	41.58
54	13.91	18.05	22.26	26.28	34.98	43.18
56	14.42	18.98	23.08	27.25	36.27	44.78
58	14.94	19.65	23.91	28.23	37.56	46.38
60	15.45	20.34	24.73	29.20	38.84	47.97

Spiral Pipe - Clutcher Size Calculation Chart - Table A-5						
Single Point Saddle Hanging Configuration - 12' Hanger Spacing						
Diameter (Inches)	Approx. Single Wall Spiral Pipe Weight/Lbs. per Linear Foot					
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	16 gauge
3	0.76	1.01	1.23	1.48		
4	1.02	1.35	1.64	1.94		
5	1.28	1.69	2.06	2.42		
6	1.54	2.03	2.47	2.91	3.88	4.76
7	1.79	2.37	2.88	3.40	4.52	5.58
8	2.05	2.71	3.29	3.86	5.17	6.34
9	2.31	3.05	3.71	4.37	5.82	7.18
10	2.57	3.39	4.12	4.86	6.47	7.92
11	2.82	3.73	4.54	5.34	7.11	8.72
12	3.08	4.07	4.95	5.83	7.75	9.54
13	3.34	4.41	5.36	6.32	8.48	10.31
14	3.59	4.74	5.77	6.81	9.05	11.05
15	3.84	5.08	6.18	7.28	9.70	11.80
16	4.11	5.42	6.60	7.78	10.34	12.65
17	4.36	5.77	7.02	8.25	11.08	13.47
18	4.63	6.10	7.43	8.76	11.64	14.32
19	4.89	6.44	7.84	9.25	12.29	15.09
20	5.15	6.78	8.25	9.73	12.93	15.85
22	5.65	7.46	9.08	10.71	14.23	17.50
24	6.16	8.14	9.91	11.68	15.52	19.00
26	6.67	8.82	10.73	12.66	16.82	20.70
28	7.18	9.50	11.56	13.63	18.11	22.20
30	7.71	10.18	12.38	14.60	19.41	23.90
32	8.22	10.84	13.21	15.58	20.71	25.50
34	8.72	11.54	14.04	16.51	21.97	27.08
36	9.27	12.20	14.90	17.53	23.29	28.80
38	9.73	12.88	15.67	18.46	24.51	30.26
40	10.30	13.56	16.50	19.48	25.88	31.75
42	10.77	14.25	17.32	20.40	27.21	33.47
44	11.35	14.91	18.16	21.42	28.47	35.00
46	11.86	15.59	18.99	22.39	29.77	36.65
48	12.36	16.26	19.82	23.36	31.06	38.30
50	12.88	16.69	20.63	24.33	32.37	39.94
52	13.39	17.12	21.44	25.30	33.68	41.58
54	13.91	18.05	22.26	26.28	34.98	43.18
56	14.42	18.98	23.08	27.25	36.27	44.78
58	14.94	19.65	23.91	28.23	37.56	46.38
60	15.45	20.34	24.73	29.20	38.84	47.97

Spiral Pipe - Clutcher Size Calculation Chart - Table A-6						
Single Point Saddle Hanging Configuration - 10' Hanger Spacing						
Diameter (Inches)	Approx. Single Wall Spiral Pipe Weight/Lbs. per Linear Foot					
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	16 gauge
3	0.76	1.01	1.23	1.48		
4	1.02	1.35	1.64	1.94		
5	1.28	1.69	2.06	2.42		
6	1.54	2.03	2.47	2.91	3.88	4.76
7	1.79	2.37	2.88	3.40	4.52	5.58
8	2.05	2.71	3.29	3.86	5.17	6.34
9	2.31	3.05	3.71	4.37	5.82	7.18
10	2.57	3.39	4.12	4.86	6.47	7.92
11	2.82	3.73	4.54	5.34	7.11	8.72
12	3.08	4.07	4.95	5.83	7.75	9.54
13	3.34	4.41	5.36	6.32	8.48	10.31
14	3.59	4.74	5.77	6.81	9.05	11.05
15	3.84	5.08	6.18	7.28	9.70	11.80
16	4.11	5.42	6.60	7.78	10.34	12.65
17	4.36	5.77	7.02	8.25	11.08	13.47
18	4.63	6.10	7.43	8.76	11.64	14.32
19	4.89	6.44	7.84	9.25	12.29	15.09
20	5.15	6.78	8.25	9.73	12.93	15.85
22	5.65	7.46	9.08	10.71	14.23	17.50
24	6.16	8.14	9.91	11.68	15.52	19.00
26	6.67	8.82	10.73	12.66	16.82	20.70
28	7.18	9.50	11.56	13.63	18.11	22.20
30	7.71	10.18	12.38	14.60	19.41	23.90
32	8.22	10.84	13.21	15.58	20.71	25.50
34	8.72	11.54	14.04	16.51	21.97	27.08
36	9.27	12.20	14.90	17.53	23.29	28.80
38	9.73	12.88	15.67	18.46	24.51	30.26
40	10.30	13.56	16.50	19.48	25.88	31.75
42	10.77	14.25	17.32	20.40	27.21	33.47
44	11.35	14.91	18.16	21.42	28.47	35.00
46	11.86	15.59	18.99	22.39	29.77	36.65
48	12.36	16.26	19.82	23.36	31.06	38.30
50	12.88	16.69	20.63	24.33	32.37	39.94
52	13.39	17.12	21.44	25.30	33.68	41.58
54	13.91	18.05	22.26	26.28	34.98	43.18
56	14.42	18.98	23.08	27.25	36.27	44.78
58	14.94	19.65	23.91	28.23	37.56	46.38
60	15.45	20.34	24.73	29.20	38.84	47.97

Spiral Pipe - Clutcher Size Calculation Chart - Table A-7						
Single Point Saddle Hanging Configuration - 6' Hanger Spacing						
Diameter (Inches)	Approx. Single Wall Spiral Pipe Weight/Lbs. per Linear Foot					
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	16 gauge
3	0.76	1.01	1.23	1.48		
4	1.02	1.35	1.64	1.94		
5	1.28	1.69	2.06	2.42		
6	1.54	2.03	2.47	2.91	3.88	4.76
7	1.79	2.37	2.88	3.40	4.52	5.58
8	2.05	2.71	3.29	3.86	5.17	6.34
9	2.31	3.05	3.71	4.37	5.82	7.18
10	2.57	3.39	4.12	4.86	6.47	7.92
11	2.82	3.73	4.54	5.34	7.11	8.72
12	3.08	4.07	4.95	5.83	7.75	9.54
13	3.34	4.41	5.36	6.32	8.48	10.31
14	3.59	4.74	5.77	6.81	9.05	11.05
15	3.84	5.08	6.18	7.28	9.70	11.80
16	4.11	5.42	6.60	7.78	10.34	12.65
17	4.36	5.77	7.02	8.25	11.08	13.47
18	4.63	6.10	7.43	8.76	11.64	14.32
19	4.89	6.44	7.84	9.25	12.29	15.09
20	5.15	6.78	8.25	9.73	12.93	15.85
22	5.65	7.46	9.08	10.71	14.23	17.50
24	6.16	8.14	9.91	11.68	15.52	19.00
26	6.67	8.82	10.73	12.66	16.82	20.70
28	7.18	9.50	11.56	13.63	18.11	22.20
30	7.71	10.18	12.38	14.60	19.41	23.90
32	8.22	10.84	13.21	15.58	20.71	25.50
34	8.72	11.54	14.04	16.51	21.97	27.08
36	9.27	12.20	14.90	17.53	23.29	28.80
38	9.73	12.88	15.67	18.46	24.51	30.26
40	10.30	13.56	16.50	19.48	25.88	31.75
42	10.77	14.25	17.32	20.40	27.21	33.47
44	11.35	14.91	18.16	21.42	28.47	35.00
46	11.86	15.59	18.99	22.39	29.77	36.65
48	12.36	16.26	19.82	23.36	31.06	38.30
50	12.88	16.69	20.63	24.33	32.37	39.94
52	13.39	17.12	21.44	25.30	33.68	41.58
54	13.91	18.05	22.26	26.28	34.98	43.18
56	14.42	18.98	23.08	27.25	36.27	44.78
58	14.94	19.65	23.91	28.23	37.56	46.38
60	15.45	20.34	24.73	29.20	38.84	47.97

Spiral Pipe - Clutcher Size Calculation Chart - Table A-8						
Single Point Saddle Hanging Configuration - 5' Hanger Spacing						
Diameter (Inches)	Approx. Single Wall Spiral Pipe Weight/Lbs. per Linear Foot					
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	16 gauge
3	0.76	1.01	1.23	1.48		
4	1.02	1.35	1.64	1.94		
5	1.28	1.69	2.06	2.42		
6	1.54	2.03	2.47	2.91	3.88	4.76
7	1.79	2.37	2.88	3.40	4.52	5.58
8	2.05	2.71	3.29	3.86	5.17	6.34
9	2.31	3.05	3.71	4.37	5.82	7.18
10	2.57	3.39	4.12	4.86	6.47	7.92
11	2.82	3.73	4.54	5.34	7.11	8.72
12	3.08	4.07	4.95	5.83	7.75	9.54
13	3.34	4.41	5.36	6.32	8.48	10.31
14	3.59	4.74	5.77	6.81	9.05	11.05
15	3.84	5.08	6.18	7.28	9.70	11.80
16	4.11	5.42	6.60	7.78	10.34	12.65
17	4.36	5.77	7.02	8.25	11.08	13.47
18	4.63	6.10	7.43	8.76	11.64	14.32
19	4.89	6.44	7.84	9.25	12.29	15.09
20	5.15	6.78	8.25	9.73	12.93	15.85
22	5.65	7.46	9.08	10.71	14.23	17.50
24	6.16	8.14	9.91	11.68	15.52	19.00
26	6.67	8.82	10.73	12.66	16.82	20.70
28	7.18	9.50	11.56	13.63	18.11	22.20
30	7.71	10.18	12.38	14.60	19.41	23.90
32	8.22	10.84	13.21	15.58	20.71	25.50
34	8.72	11.54	14.04	16.51	21.97	27.08
36	9.27	12.20	14.90	17.53	23.29	28.80
38	9.73	12.88	15.67	18.46	24.51	30.26
40	10.30	13.56	16.50	19.48	25.88	31.75
42	10.77	14.25	17.32	20.40	27.21	33.47
44	11.35	14.91	18.16	21.42	28.47	35.00
46	11.86	15.59	18.99	22.39	29.77	36.65
48	12.36	16.26	19.82	23.36	31.06	38.30
50	12.88	16.69	20.63	24.33	32.37	39.94
52	13.39	17.12	21.44	25.30	33.68	41.58
54	13.91	18.05	22.26	26.28	34.98	43.18
56	14.42	18.98	23.08	27.25	36.27	44.78
58	14.94	19.65	23.91	28.23	37.56	46.38
60	15.45	20.34	24.73	29.20	38.84	47.97

Spiral Pipe - Clutcher Size Calculation Chart - Table A-9						
Spread Horseshoe at 15° Hanging Configuration - 12' Hanger Spacing						
Diameter (Inches)	Approx. Single Wall Spiral Pipe Weight/Lbs. per Linear Foot					
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	16 gauge
3	0.76	1.01	1.23	1.48		
4	1.02	1.35	1.64	1.94		
5	1.28	1.69	2.06	2.42		
6	1.54	2.03	2.47	2.91	3.88	4.76
7	1.79	2.37	2.88	3.40	4.52	5.58
8	2.05	2.71	3.29	3.86	5.17	6.34
9	2.31	3.05	3.71	4.37	5.82	7.18
10	2.57	3.39	4.12	4.86	6.47	7.92
11	2.82	3.73	4.54	5.34	7.11	8.72
12	3.08	4.07	4.95	5.83	7.75	9.54
13	3.34	4.41	5.36	6.32	8.48	10.31
14	3.59	4.74	5.77	6.81	9.05	11.05
15	3.84	5.08	6.18	7.28	9.70	11.80
16	4.11	5.42	6.60	7.78	10.34	12.65
17	4.36	5.77	7.02	8.25	11.08	13.47
18	4.63	6.10	7.43	8.76	11.64	14.32
19	4.89	6.44	7.84	9.25	12.29	15.09
20	5.15	6.78	8.25	9.73	12.93	15.85
22	5.65	7.46	9.08	10.71	14.23	17.50
24	6.16	8.14	9.91	11.68	15.52	19.00
26	6.67	8.82	10.73	12.66	16.82	20.70
28	7.18	9.50	11.56	13.63	18.11	22.20
30	7.71	10.18	12.38	14.60	19.41	23.90
32	8.22	10.84	13.21	15.58	20.71	25.50
34	8.72	11.54	14.04	16.51	21.97	27.08
36	9.27	12.20	14.90	17.53	23.29	28.80
38	9.73	12.88	15.67	18.46	24.51	30.26
40	10.30	13.56	16.50	19.48	25.88	31.75
42	10.77	14.25	17.32	20.40	27.21	33.47
44	11.35	14.91	18.16	21.42	28.47	35.00
46	11.86	15.59	18.99	22.39	29.77	36.65
48	12.36	16.26	19.82	23.36	31.06	38.30
50	12.88	16.69	20.63	24.33	32.37	39.94
52	13.39	17.12	21.44	25.30	33.68	41.58
54	13.91	18.05	22.26	26.28	34.98	43.18
56	14.42	18.98	23.08	27.25	36.27	44.78
58	14.94	19.65	23.91	28.23	37.56	46.38
60	15.45	20.34	24.73	29.20	38.84	47.97

Spiral Pipe - Clutcher Size Calculation Chart - Table A-10						
Spread Horseshoe at 15° Hanging Configuration - 10' Hanger Spacing						
Diameter (Inches)	Approx. Single Wall Spiral Pipe Weight/Lbs. per Linear Foot					
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	16 gauge
3	0.76	1.01	1.23	1.48		
4	1.02	1.35	1.64	1.94		
5	1.28	1.69	2.06	2.42		
6	1.54	2.03	2.47	2.91	3.88	4.76
7	1.79	2.37	2.88	3.40	4.52	5.58
8	2.05	2.71	3.29	3.86	5.17	6.34
9	2.31	3.05	3.71	4.37	5.82	7.18
10	2.57	3.39	4.12	4.86	6.47	7.92
11	2.82	3.73	4.54	5.34	7.11	8.72
12	3.08	4.07	4.95	5.83	7.75	9.54
13	3.34	4.41	5.36	6.32	8.48	10.31
14	3.59	4.74	5.77	6.81	9.05	11.05
15	3.84	5.08	6.18	7.28	9.70	11.80
16	4.11	5.42	6.60	7.78	10.34	12.65
17	4.36	5.77	7.02	8.25	11.08	13.47
18	4.63	6.10	7.43	8.76	11.64	14.32
19	4.89	6.44	7.84	9.25	12.29	15.09
20	5.15	6.78	8.25	9.73	12.93	15.85
22	5.65	7.46	9.08	10.71	14.23	17.50
24	6.16	8.14	9.91	11.68	15.52	19.00
26	6.67	8.82	10.73	12.66	16.82	20.70
28	7.18	9.50	11.56	13.63	18.11	22.20
30	7.71	10.18	12.38	14.60	19.41	23.90
32	8.22	10.84	13.21	15.58	20.71	25.50
34	8.72	11.54	14.04	16.51	21.97	27.08
36	9.27	12.20	14.90	17.53	23.29	28.80
38	9.73	12.88	15.67	18.46	24.51	30.26
40	10.30	13.56	16.50	19.48	25.88	31.75
42	10.77	14.25	17.32	20.40	27.21	33.47
44	11.35	14.91	18.16	21.42	28.47	35.00
46	11.86	15.59	18.99	22.39	29.77	36.65
48	12.36	16.26	19.82	23.36	31.06	38.30
50	12.88	16.69	20.63	24.33	32.37	39.94
52	13.39	17.12	21.44	25.30	33.68	41.58
54	13.91	18.05	22.26	26.28	34.98	43.18
56	14.42	18.98	23.08	27.25	36.27	44.78
58	14.94	19.65	23.91	28.23	37.56	46.38
60	15.45	20.34	24.73	29.20	38.84	47.97

Spiral Pipe - Clutcher Size Calculation Chart - Table A-11						
Spread Horseshoe at 15° Hanging Configuration - 6' Hanger Spacing						
Diameter (Inches)	Approx. Single Wall Spiral Pipe Weight/Lbs. per Linear Foot					
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	16 gauge
3	0.76	1.01	1.23	1.48		
4	1.02	1.35	1.64	1.94		
5	1.28	1.69	2.06	2.42		
6	1.54	2.03	2.47	2.91	3.88	4.76
7	1.79	2.37	2.88	3.40	4.52	5.58
8	2.05	2.71	3.29	3.86	5.17	6.34
9	2.31	3.05	3.71	4.37	5.82	7.18
10	2.57	3.39	4.12	4.86	6.47	7.92
11	2.82	3.73	4.54	5.34	7.11	8.72
12	3.08	4.07	4.95	5.83	7.75	9.54
13	3.34	4.41	5.36	6.32	8.48	10.31
14	3.59	4.74	5.77	6.81	9.05	11.05
15	3.84	5.08	6.18	7.28	9.70	11.80
16	4.11	5.42	6.60	7.78	10.34	12.65
17	4.36	5.77	7.02	8.25	11.08	13.47
18	4.63	6.10	7.43	8.76	11.64	14.32
19	4.89	6.44	7.84	9.25	12.29	15.09
20	5.15	6.78	8.25	9.73	12.93	15.85
22	5.65	7.46	9.08	10.71	14.23	17.50
24	6.16	8.14	9.91	11.68	15.52	19.00
26	6.67	8.82	10.73	12.66	16.82	20.70
28	7.18	9.50	11.56	13.63	18.11	22.20
30	7.71	10.18	12.38	14.60	19.41	23.90
32	8.22	10.84	13.21	15.58	20.71	25.50
34	8.72	11.54	14.04	16.51	21.97	27.08
36	9.27	12.20	14.90	17.53	23.29	28.80
38	9.73	12.88	15.67	18.46	24.51	30.26
40	10.30	13.56	16.50	19.48	25.88	31.75
42	10.77	14.25	17.32	20.40	27.21	33.47
44	11.35	14.91	18.16	21.42	28.47	35.00
46	11.86	15.59	18.99	22.39	29.77	36.65
48	12.36	16.26	19.82	23.36	31.06	38.30
50	12.88	16.69	20.63	24.33	32.37	39.94
52	13.39	17.12	21.44	25.30	33.68	41.58
54	13.91	18.05	22.26	26.28	34.98	43.18
56	14.42	18.98	23.08	27.25	36.27	44.78
58	14.94	19.65	23.91	28.23	37.56	46.38
60	15.45	20.34	24.73	29.20	38.84	47.97

Spiral Pipe - Clutcher Size Calculation Chart - Table A-12						
Spread Horseshoe at 15° Hanging Configuration - 5' Hanger Spacing						
Diameter (Inches)	Approx. Single Wall Spiral Pipe Weight/Lbs. per Linear Foot					
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	16 gauge
3	0.76	1.01	1.23	1.48		
4	1.02	1.35	1.64	1.94		
5	1.28	1.69	2.06	2.42		
6	1.54	2.03	2.47	2.91	3.88	4.76
7	1.79	2.37	2.88	3.40	4.52	5.58
8	2.05	2.71	3.29	3.86	5.17	6.34
9	2.31	3.05	3.71	4.37	5.82	7.18
10	2.57	3.39	4.12	4.86	6.47	7.92
11	2.82	3.73	4.54	5.34	7.11	8.72
12	3.08	4.07	4.95	5.83	7.75	9.54
13	3.34	4.41	5.36	6.32	8.48	10.31
14	3.59	4.74	5.77	6.81	9.05	11.05
15	3.84	5.08	6.18	7.28	9.70	11.80
16	4.11	5.42	6.60	7.78	10.34	12.65
17	4.36	5.77	7.02	8.25	11.08	13.47
18	4.63	6.10	7.43	8.76	11.64	14.32
19	4.89	6.44	7.84	9.25	12.29	15.09
20	5.15	6.78	8.25	9.73	12.93	15.85
22	5.65	7.46	9.08	10.71	14.23	17.50
24	6.16	8.14	9.91	11.68	15.52	19.00
26	6.67	8.82	10.73	12.66	16.82	20.70
28	7.18	9.50	11.56	13.63	18.11	22.20
30	7.71	10.18	12.38	14.60	19.41	23.90
32	8.22	10.84	13.21	15.58	20.71	25.50
34	8.72	11.54	14.04	16.51	21.97	27.08
36	9.27	12.20	14.90	17.53	23.29	28.80
38	9.73	12.88	15.67	18.46	24.51	30.26
40	10.30	13.56	16.50	19.48	25.88	31.75
42	10.77	14.25	17.32	20.40	27.21	33.47
44	11.35	14.91	18.16	21.42	28.47	35.00
46	11.86	15.59	18.99	22.39	29.77	36.65
48	12.36	16.26	19.82	23.36	31.06	38.30
50	12.88	16.69	20.63	24.33	32.37	39.94
52	13.39	17.12	21.44	25.30	33.68	41.58
54	13.91	18.05	22.26	26.28	34.98	43.18
56	14.42	18.98	23.08	27.25	36.27	44.78
58	14.94	19.65	23.91	28.23	37.56	46.38
60	15.45	20.34	24.73	29.20	38.84	47.97

Spiral Pipe - Clutcher Size Calculation Chart - Table A-13						
Spread Horseshoe at 30° Hanging Configuration - 12' Hanger Spacing						
Diameter (Inches)	Approx. Single Wall Spiral Pipe Weight/Lbs. per Linear Foot					
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	16 gauge
3	0.76	1.01	1.23	1.48		
4	1.02	1.35	1.64	1.94		
5	1.28	1.69	2.06	2.42		
6	1.54	2.03	2.47	2.91	3.88	4.76
7	1.79	2.37	2.88	3.40	4.52	5.58
8	2.05	2.71	3.29	3.86	5.17	6.34
9	2.31	3.05	3.71	4.37	5.82	7.18
10	2.57	3.39	4.12	4.86	6.47	7.92
11	2.82	3.73	4.54	5.34	7.11	8.72
12	3.08	4.07	4.95	5.83	7.75	9.54
13	3.34	4.41	5.36	6.32	8.48	10.31
14	3.59	4.74	5.77	6.81	9.05	11.05
15	3.84	5.08	6.18	7.28	9.70	11.80
16	4.11	5.42	6.60	7.78	10.34	12.65
17	4.36	5.77	7.02	8.25	11.08	13.47
18	4.63	6.10	7.43	8.76	11.64	14.32
19	4.89	6.44	7.84	9.25	12.29	15.09
20	5.15	6.78	8.25	9.73	12.93	15.85
22	5.65	7.46	9.08	10.71	14.23	17.50
24	6.16	8.14	9.91	11.68	15.52	19.00
26	6.67	8.82	10.73	12.66	16.82	20.70
28	7.18	9.50	11.56	13.63	18.11	22.20
30	7.71	10.18	12.38	14.60	19.41	23.90
32	8.22	10.84	13.21	15.58	20.71	25.50
34	8.72	11.54	14.04	16.51	21.97	27.08
36	9.27	12.20	14.90	17.53	23.29	28.80
38	9.73	12.88	15.67	18.46	24.51	30.26
40	10.30	13.56	16.50	19.48	25.88	31.75
42	10.77	14.25	17.32	20.40	27.21	33.47
44	11.35	14.91	18.16	21.42	28.47	35.00
46	11.86	15.59	18.99	22.39	29.77	36.65
48	12.36	16.26	19.82	23.36	31.06	38.30
50	12.88	16.69	20.63	24.33	32.37	39.94
52	13.39	17.12	21.44	25.30	33.68	41.58
54	13.91	18.05	22.26	26.28	34.98	43.18
56	14.42	18.98	23.08	27.25	36.27	44.78
58	14.94	19.65	23.91	28.23	37.56	46.38
60	15.45	20.34	24.73	29.20	38.84	47.97

Spiral Pipe - Clutcher Size Calculation Chart - Table A-14						
Spread Horseshoe at 30° Hanging Configuration - 10' Hanger Spacing						
Diameter (Inches)	Approx. Single Wall Spiral Pipe Weight/Lbs. per Linear Foot					
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	16 gauge
3	0.76	1.01	1.23	1.48		
4	1.02	1.35	1.64	1.94		
5	1.28	1.69	2.06	2.42		
6	1.54	2.03	2.47	2.91	3.88	4.76
7	1.79	2.37	2.88	3.40	4.52	5.58
8	2.05	2.71	3.29	3.86	5.17	6.34
9	2.31	3.05	3.71	4.37	5.82	7.18
10	2.57	3.39	4.12	4.86	6.47	7.92
11	2.82	3.73	4.54	5.34	7.11	8.72
12	3.08	4.07	4.95	5.83	7.75	9.54
13	3.34	4.41	5.36	6.32	8.48	10.31
14	3.59	4.74	5.77	6.81	9.05	11.05
15	3.84	5.08	6.18	7.28	9.70	11.80
16	4.11	5.42	6.60	7.78	10.34	12.65
17	4.36	5.77	7.02	8.25	11.08	13.47
18	4.63	6.10	7.43	8.76	11.64	14.32
19	4.89	6.44	7.84	9.25	12.29	15.09
20	5.15	6.78	8.25	9.73	12.93	15.85
22	5.65	7.46	9.08	10.71	14.23	17.50
24	6.16	8.14	9.91	11.68	15.52	19.00
26	6.67	8.82	10.73	12.66	16.82	20.70
28	7.18	9.50	11.56	13.63	18.11	22.20
30	7.71	10.18	12.38	14.60	19.41	23.90
32	8.22	10.84	13.21	15.58	20.71	25.50
34	8.72	11.54	14.04	16.51	21.97	27.08
36	9.27	12.20	14.90	17.53	23.29	28.80
38	9.73	12.88	15.67	18.46	24.51	30.26
40	10.30	13.56	16.50	19.48	25.88	31.75
42	10.77	14.25	17.32	20.40	27.21	33.47
44	11.35	14.91	18.16	21.42	28.47	35.00
46	11.86	15.59	18.99	22.39	29.77	36.65
48	12.36	16.26	19.82	23.36	31.06	38.30
50	12.88	16.69	20.63	24.33	32.37	39.94
52	13.39	17.12	21.44	25.30	33.68	41.58
54	13.91	18.05	22.26	26.28	34.98	43.18
56	14.42	18.98	23.08	27.25	36.27	44.78
58	14.94	19.65	23.91	28.23	37.56	46.38
60	15.45	20.34	24.73	29.20	38.84	47.97

Spiral Pipe - Clutcher Size Calculation Chart - Table A-15						
Spread Horseshoe at 30° Hanging Configuration - 6' Hanger Spacing						
Diameter (Inches)	Approx. Single Wall Spiral Pipe Weight/Lbs. per Linear Foot					
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	16 gauge
3	0.76	1.01	1.23	1.48		
4	1.02	1.35	1.64	1.94		
5	1.28	1.69	2.06	2.42		
6	1.54	2.03	2.47	2.91	3.88	4.76
7	1.79	2.37	2.88	3.40	4.52	5.58
8	2.05	2.71	3.29	3.86	5.17	6.34
9	2.31	3.05	3.71	4.37	5.82	7.18
10	2.57	3.39	4.12	4.86	6.47	7.92
11	2.82	3.73	4.54	5.34	7.11	8.72
12	3.08	4.07	4.95	5.83	7.75	9.54
13	3.34	4.41	5.36	6.32	8.48	10.31
14	3.59	4.74	5.77	6.81	9.05	11.05
15	3.84	5.08	6.18	7.28	9.70	11.80
16	4.11	5.42	6.60	7.78	10.34	12.65
17	4.36	5.77	7.02	8.25	11.08	13.47
18	4.63	6.10	7.43	8.76	11.64	14.32
19	4.89	6.44	7.84	9.25	12.29	15.09
20	5.15	6.78	8.25	9.73	12.93	15.85
22	5.65	7.46	9.08	10.71	14.23	17.50
24	6.16	8.14	9.91	11.68	15.52	19.00
26	6.67	8.82	10.73	12.66	16.82	20.70
28	7.18	9.50	11.56	13.63	18.11	22.20
30	7.71	10.18	12.38	14.60	19.41	23.90
32	8.22	10.84	13.21	15.58	20.71	25.50
34	8.72	11.54	14.04	16.51	21.97	27.08
36	9.27	12.20	14.90	17.53	23.29	28.80
38	9.73	12.88	15.67	18.46	24.51	30.26
40	10.30	13.56	16.50	19.48	25.88	31.75
42	10.77	14.25	17.32	20.40	27.21	33.47
44	11.35	14.91	18.16	21.42	28.47	35.00
46	11.86	15.59	18.99	22.39	29.77	36.65
48	12.36	16.26	19.82	23.36	31.06	38.30
50	12.88	16.69	20.63	24.33	32.37	39.94
52	13.39	17.12	21.44	25.30	33.68	41.58
54	13.91	18.05	22.26	26.28	34.98	43.18
56	14.42	18.98	23.08	27.25	36.27	44.78
58	14.94	19.65	23.91	28.23	37.56	46.38
60	15.45	20.34	24.73	29.20	38.84	47.97

Spiral Pipe - Clutcher Size Calculation Chart - Table A-16						
Spread Horseshoe at 30° Hanging Configuration - 5' Hanger Spacing						
Diameter (Inches)	Approx. Single Wall Spiral Pipe Weight/Lbs. per Linear Foot					
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	16 gauge
3	0.76	1.01	1.23	1.48		
4	1.02	1.35	1.64	1.94		
5	1.28	1.69	2.06	2.42		
6	1.54	2.03	2.47	2.91	3.88	4.76
7	1.79	2.37	2.88	3.40	4.52	5.58
8	2.05	2.71	3.29	3.86	5.17	6.34
9	2.31	3.05	3.71	4.37	5.82	7.18
10	2.57	3.39	4.12	4.86	6.47	7.92
11	2.82	3.73	4.54	5.34	7.11	8.72
12	3.08	4.07	4.95	5.83	7.75	9.54
13	3.34	4.41	5.36	6.32	8.48	10.31
14	3.59	4.74	5.77	6.81	9.05	11.05
15	3.84	5.08	6.18	7.28	9.70	11.80
16	4.11	5.42	6.60	7.78	10.34	12.65
17	4.36	5.77	7.02	8.25	11.08	13.47
18	4.63	6.10	7.43	8.76	11.64	14.32
19	4.89	6.44	7.84	9.25	12.29	15.09
20	5.15	6.78	8.25	9.73	12.93	15.85
22	5.65	7.46	9.08	10.71	14.23	17.50
24	6.16	8.14	9.91	11.68	15.52	19.00
26	6.67	8.82	10.73	12.66	16.82	20.70
28	7.18	9.50	11.56	13.63	18.11	22.20
30	7.71	10.18	12.38	14.60	19.41	23.90
32	8.22	10.84	13.21	15.58	20.71	25.50
34	8.72	11.54	14.04	16.51	21.97	27.08
36	9.27	12.20	14.90	17.53	23.29	28.80
38	9.73	12.88	15.67	18.46	24.51	30.26
40	10.30	13.56	16.50	19.48	25.88	31.75
42	10.77	14.25	17.32	20.40	27.21	33.47
44	11.35	14.91	18.16	21.42	28.47	35.00
46	11.86	15.59	18.99	22.39	29.77	36.65
48	12.36	16.26	19.82	23.36	31.06	38.30
50	12.88	16.69	20.63	24.33	32.37	39.94
52	13.39	17.12	21.44	25.30	33.68	41.58
54	13.91	18.05	22.26	26.28	34.98	43.18
56	14.42	18.98	23.08	27.25	36.27	44.78
58	14.94	19.65	23.91	28.23	37.56	46.38
60	15.45	20.34	24.73	29.20	38.84	47.97

Spiral Pipe - Clutcher Size Calculation Chart - Table A-17						
Spread Horseshoe at 45° Hanging Configuration - 12' Hanger Spacing						
Diameter (Inches)	Approx. Single Wall Spiral Pipe Weight/Lbs. per Linear Foot					
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	16 gauge
3	0.76	1.01	1.23	1.48		
4	1.02	1.35	1.64	1.94		
5	1.28	1.69	2.06	2.42		
6	1.54	2.03	2.47	2.91	3.88	4.76
7	1.79	2.37	2.88	3.40	4.52	5.58
8	2.05	2.71	3.29	3.86	5.17	6.34
9	2.31	3.05	3.71	4.37	5.82	7.18
10	2.57	3.39	4.12	4.86	6.47	7.92
11	2.82	3.73	4.54	5.34	7.11	8.72
12	3.08	4.07	4.95	5.83	7.75	9.54
13	3.34	4.41	5.36	6.32	8.48	10.31
14	3.59	4.74	5.77	6.81	9.05	11.05
15	3.84	5.08	6.18	7.28	9.70	11.80
16	4.11	5.42	6.60	7.78	10.34	12.65
17	4.36	5.77	7.02	8.25	11.08	13.47
18	4.63	6.10	7.43	8.76	11.64	14.32
19	4.89	6.44	7.84	9.25	12.29	15.09
20	5.15	6.78	8.25	9.73	12.93	15.85
22	5.65	7.46	9.08	10.71	14.23	17.50
24	6.16	8.14	9.91	11.68	15.52	19.00
26	6.67	8.82	10.73	12.66	16.82	20.70
28	7.18	9.50	11.56	13.63	18.11	22.20
30	7.71	10.18	12.38	14.60	19.41	23.90
32	8.22	10.84	13.21	15.58	20.71	25.50
34	8.72	11.54	14.04	16.51	21.97	27.08
36	9.27	12.20	14.90	17.53	23.29	28.80
38	9.73	12.88	15.67	18.46	24.51	30.26
40	10.30	13.56	16.50	19.48	25.88	31.75
42	10.77	14.25	17.32	20.40	27.21	33.47
44	11.35	14.91	18.16	21.42	28.47	35.00
46	11.86	15.59	18.99	22.39	29.77	36.65
48	12.36	16.26	19.82	23.36	31.06	38.30
50	12.88	16.69	20.63	24.33	32.37	39.94
52	13.39	17.12	21.44	25.30	33.68	41.58
54	13.91	18.05	22.26	26.28	34.98	43.18
56	14.42	18.98	23.08	27.25	36.27	44.78
58	14.94	19.65	23.91	28.23	37.56	46.38
60	15.45	20.34	24.73	29.20	38.84	47.97

Spiral Pipe - Clutcher Size Calculation Chart - Table A-18						
Spread Horseshoe at 45° Hanging Configuration - 10' Hanger Spacing						
Diameter (Inches)	Approx. Single Wall Spiral Pipe Weight/Lbs. per Linear Foot					
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	16 gauge
3	0.76	1.01	1.23	1.48		
4	1.02	1.35	1.64	1.94		
5	1.28	1.69	2.06	2.42		
6	1.54	2.03	2.47	2.91	3.88	4.76
7	1.79	2.37	2.88	3.40	4.52	5.58
8	2.05	2.71	3.29	3.86	5.17	6.34
9	2.31	3.05	3.71	4.37	5.82	7.18
10	2.57	3.39	4.12	4.86	6.47	7.92
11	2.82	3.73	4.54	5.34	7.11	8.72
12	3.08	4.07	4.95	5.83	7.75	9.54
13	3.34	4.41	5.36	6.32	8.48	10.31
14	3.59	4.74	5.77	6.81	9.05	11.05
15	3.84	5.08	6.18	7.28	9.70	11.80
16	4.11	5.42	6.60	7.78	10.34	12.65
17	4.36	5.77	7.02	8.25	11.08	13.47
18	4.63	6.10	7.43	8.76	11.64	14.32
19	4.89	6.44	7.84	9.25	12.29	15.09
20	5.15	6.78	8.25	9.73	12.93	15.85
22	5.65	7.46	9.08	10.71	14.23	17.50
24	6.16	8.14	9.91	11.68	15.52	19.00
26	6.67	8.82	10.73	12.66	16.82	20.70
28	7.18	9.50	11.56	13.63	18.11	22.20
30	7.71	10.18	12.38	14.60	19.41	23.90
32	8.22	10.84	13.21	15.58	20.71	25.50
34	8.72	11.54	14.04	16.51	21.97	27.08
36	9.27	12.20	14.90	17.53	23.29	28.80
38	9.73	12.88	15.67	18.46	24.51	30.26
40	10.30	13.56	16.50	19.48	25.88	31.75
42	10.77	14.25	17.32	20.40	27.21	33.47
44	11.35	14.91	18.16	21.42	28.47	35.00
46	11.86	15.59	18.99	22.39	29.77	36.65
48	12.36	16.26	19.82	23.36	31.06	38.30
50	12.88	16.69	20.63	24.33	32.37	39.94
52	13.39	17.12	21.44	25.30	33.68	41.58
54	13.91	18.05	22.26	26.28	34.98	43.18
56	14.42	18.98	23.08	27.25	36.27	44.78
58	14.94	19.65	23.91	28.23	37.56	46.38
60	15.45	20.34	24.73	29.20	38.84	47.97

Spiral Pipe - Clutcher Size Calculation Chart - Table A-19						
Spread Horseshoe at 45° Hanging Configuration - 6' Hanger Spacing						
Diameter (Inches)	Approx. Single Wall Spiral Pipe Weight/Lbs. per Linear Foot					
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	16 gauge
3	0.76	1.01	1.23	1.48		
4	1.02	1.35	1.64	1.94		
5	1.28	1.69	2.06	2.42		
6	1.54	2.03	2.47	2.91	3.88	4.76
7	1.79	2.37	2.88	3.40	4.52	5.58
8	2.05	2.71	3.29	3.86	5.17	6.34
9	2.31	3.05	3.71	4.37	5.82	7.18
10	2.57	3.39	4.12	4.86	6.47	7.92
11	2.82	3.73	4.54	5.34	7.11	8.72
12	3.08	4.07	4.95	5.83	7.75	9.54
13	3.34	4.41	5.36	6.32	8.48	10.31
14	3.59	4.74	5.77	6.81	9.05	11.05
15	3.84	5.08	6.18	7.28	9.70	11.80
16	4.11	5.42	6.60	7.78	10.34	12.65
17	4.36	5.77	7.02	8.25	11.08	13.47
18	4.63	6.10	7.43	8.76	11.64	14.32
19	4.89	6.44	7.84	9.25	12.29	15.09
20	5.15	6.78	8.25	9.73	12.93	15.85
22	5.65	7.46	9.08	10.71	14.23	17.50
24	6.16	8.14	9.91	11.68	15.52	19.00
26	6.67	8.82	10.73	12.66	16.82	20.70
28	7.18	9.50	11.56	13.63	18.11	22.20
30	7.71	10.18	12.38	14.60	19.41	23.90
32	8.22	10.84	13.21	15.58	20.71	25.50
34	8.72	11.54	14.04	16.51	21.97	27.08
36	9.27	12.20	14.90	17.53	23.29	28.80
38	9.73	12.88	15.67	18.46	24.51	30.26
40	10.30	13.56	16.50	19.48	25.88	31.75
42	10.77	14.25	17.32	20.40	27.21	33.47
44	11.35	14.91	18.16	21.42	28.47	35.00
46	11.86	15.59	18.99	22.39	29.77	36.65
48	12.36	16.26	19.82	23.36	31.06	38.30
50	12.88	16.69	20.63	24.33	32.37	39.94
52	13.39	17.12	21.44	25.30	33.68	41.58
54	13.91	18.05	22.26	26.28	34.98	43.18
56	14.42	18.98	23.08	27.25	36.27	44.78
58	14.94	19.65	23.91	28.23	37.56	46.38
60	15.45	20.34	24.73	29.20	38.84	47.97

Spiral Pipe - Clutcher Size Calculation Chart - Table A-20						
Spread Horseshoe at 45° Hanging Configuration - 5' Hanger Spacing						
Diameter (Inches)	Approx. Single Wall Spiral Pipe Weight/Lbs. per Linear Foot					
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	16 gauge
3	0.76	1.01	1.23	1.48		
4	1.02	1.35	1.64	1.94		
5	1.28	1.69	2.06	2.42		
6	1.54	2.03	2.47	2.91	3.88	4.76
7	1.79	2.37	2.88	3.40	4.52	5.58
8	2.05	2.71	3.29	3.86	5.17	6.34
9	2.31	3.05	3.71	4.37	5.82	7.18
10	2.57	3.39	4.12	4.86	6.47	7.92
11	2.82	3.73	4.54	5.34	7.11	8.72
12	3.08	4.07	4.95	5.83	7.75	9.54
13	3.34	4.41	5.36	6.32	8.48	10.31
14	3.59	4.74	5.77	6.81	9.05	11.05
15	3.84	5.08	6.18	7.28	9.70	11.80
16	4.11	5.42	6.60	7.78	10.34	12.65
17	4.36	5.77	7.02	8.25	11.08	13.47
18	4.63	6.10	7.43	8.76	11.64	14.32
19	4.89	6.44	7.84	9.25	12.29	15.09
20	5.15	6.78	8.25	9.73	12.93	15.85
22	5.65	7.46	9.08	10.71	14.23	17.50
24	6.16	8.14	9.91	11.68	15.52	19.00
26	6.67	8.82	10.73	12.66	16.82	20.70
28	7.18	9.50	11.56	13.63	18.11	22.20
30	7.71	10.18	12.38	14.60	19.41	23.90
32	8.22	10.84	13.21	15.58	20.71	25.50
34	8.72	11.54	14.04	16.51	21.97	27.08
36	9.27	12.20	14.90	17.53	23.29	28.80
38	9.73	12.88	15.67	18.46	24.51	30.26
40	10.30	13.56	16.50	19.48	25.88	31.75
42	10.77	14.25	17.32	20.40	27.21	33.47
44	11.35	14.91	18.16	21.42	28.47	35.00
46	11.86	15.59	18.99	22.39	29.77	36.65
48	12.36	16.26	19.82	23.36	31.06	38.30
50	12.88	16.69	20.63	24.33	32.37	39.94
52	13.39	17.12	21.44	25.30	33.68	41.58
54	13.91	18.05	22.26	26.28	34.98	43.18
56	14.42	18.98	23.08	27.25	36.27	44.78
58	14.94	19.65	23.91	28.23	37.56	46.38
60	15.45	20.34	24.73	29.20	38.84	47.97

Spiral Pipe - Clutcher Size Calculation Chart - Table A-21						
Spread Horseshoe at 60° Hanging Configuration - 12' Hanger Spacing						
Diameter (Inches)	Approx. Single Wall Spiral Pipe Weight/Lbs. per Linear Foot					
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	16 gauge
3	0.76	1.01	1.23	1.48		
4	1.02	1.35	1.64	1.94		
5	1.28	1.69	2.06	2.42		
6	1.54	2.03	2.47	2.91	3.88	4.76
7	1.79	2.37	2.88	3.40	4.52	5.58
8	2.05	2.71	3.29	3.86	5.17	6.34
9	2.31	3.05	3.71	4.37	5.82	7.18
10	2.57	3.39	4.12	4.86	6.47	7.92
11	2.82	3.73	4.54	5.34	7.11	8.72
12	3.08	4.07	4.95	5.83	7.75	9.54
13	3.34	4.41	5.36	6.32	8.48	10.31
14	3.59	4.74	5.77	6.81	9.05	11.05
15	3.84	5.08	6.18	7.28	9.70	11.80
16	4.11	5.42	6.60	7.78	10.34	12.65
17	4.36	5.77	7.02	8.25	11.08	13.47
18	4.63	6.10	7.43	8.76	11.64	14.32
19	4.89	6.44	7.84	9.25	12.29	15.09
20	5.15	6.78	8.25	9.73	12.93	15.85
22	5.65	7.46	9.08	10.71	14.23	17.50
24	6.16	8.14	9.91	11.68	15.52	19.00
26	6.67	8.82	10.73	12.66	16.82	20.70
28	7.18	9.50	11.56	13.63	18.11	22.20
30	7.71	10.18	12.38	14.60	19.41	23.90
32	8.22	10.84	13.21	15.58	20.71	25.50
34	8.72	11.54	14.04	16.51	21.97	27.08
36	9.27	12.20	14.90	17.53	23.29	28.80
38	9.73	12.88	15.67	18.46	24.51	30.26
40	10.30	13.56	16.50	19.48	25.88	31.75
42	10.77	14.25	17.32	20.40	27.21	33.47
44	11.35	14.91	18.16	21.42	28.47	35.00
46	11.86	15.59	18.99	22.39	29.77	36.65
48	12.36	16.26	19.82	23.36	31.06	38.30
50	12.88	16.69	20.63	24.33	32.37	39.94
52	13.39	17.12	21.44	25.30	33.68	41.58
54	13.91	18.05	22.26	26.28	34.98	43.18
56	14.42	18.98	23.08	27.25	36.27	44.78
58	14.94	19.65	23.91	28.23	37.56	46.38
60	15.45	20.34	24.73	29.20	38.84	

Spiral Pipe - Clutcher Size Calculation Chart - Table A-22						
Spread Horseshoe at 60° Hanging Configuration - 10' Hanger Spacing						
Diameter (Inches)	Approx. Single Wall Spiral Pipe Weight/Lbs. per Linear Foot					
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	16 gauge
3	0.76	1.01	1.23	1.48		
4	1.02	1.35	1.64	1.94		
5	1.28	1.69	2.06	2.42		
6	1.54	2.03	2.47	2.91	3.88	4.76
7	1.79	2.37	2.88	3.40	4.52	5.58
8	2.05	2.71	3.29	3.86	5.17	6.34
9	2.31	3.05	3.71	4.37	5.82	7.18
10	2.57	3.39	4.12	4.86	6.47	7.92
11	2.82	3.73	4.54	5.34	7.11	8.72
12	3.08	4.07	4.95	5.83	7.75	9.54
13	3.34	4.41	5.36	6.32	8.48	10.31
14	3.59	4.74	5.77	6.81	9.05	11.05
15	3.84	5.08	6.18	7.28	9.70	11.80
16	4.11	5.42	6.60	7.78	10.34	12.65
17	4.36	5.77	7.02	8.25	11.08	13.47
18	4.63	6.10	7.43	8.76	11.64	14.32
19	4.89	6.44	7.84	9.25	12.29	15.09
20	5.15	6.78	8.25	9.73	12.93	15.85
22	5.65	7.46	9.08	10.71	14.23	17.50
24	6.16	8.14	9.91	11.68	15.52	19.00
26	6.67	8.82	10.73	12.66	16.82	20.70
28	7.18	9.50	11.56	13.63	18.11	22.20
30	7.71	10.18	12.38	14.60	19.41	23.90
32	8.22	10.84	13.21	15.58	20.71	25.50
34	8.72	11.54	14.04	16.51	21.97	27.08
36	9.27	12.20	14.90	17.53	23.29	28.80
38	9.73	12.88	15.67	18.46	24.51	30.26
40	10.30	13.56	16.50	19.48	25.88	31.75
42	10.77	14.25	17.32	20.40	27.21	33.47
44	11.35	14.91	18.16	21.42	28.47	35.00
46	11.86	15.59	18.99	22.39	29.77	36.65
48	12.36	16.26	19.82	23.36	31.06	38.30
50	12.88	16.69	20.63	24.33	32.37	39.94
52	13.39	17.12	21.44	25.30	33.68	41.58
54	13.91	18.05	22.26	26.28	34.98	43.18
56	14.42	18.98	23.08	27.25	36.27	44.78
58	14.94	19.65	23.91	28.23	37.56	46.38
60	15.45	20.34	24.73	29.20	38.84	47.97

Spiral Pipe - Clutcher Size Calculation Chart - Table A-23						
Spread Horseshoe at 60° Hanging Configuration - 6' Hanger Spacing						
Diameter (Inches)	Approx. Single Wall Spiral Pipe Weight/Lbs. per Linear Foot					
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	16 gauge
3	0.76	1.01	1.23	1.48		
4	1.02	1.35	1.64	1.94		
5	1.28	1.69	2.06	2.42		
6	1.54	2.03	2.47	2.91	3.88	4.76
7	1.79	2.37	2.88	3.40	4.52	5.58
8	2.05	2.71	3.29	3.86	5.17	6.34
9	2.31	3.05	3.71	4.37	5.82	7.18
10	2.57	3.39	4.12	4.86	6.47	7.92
11	2.82	3.73	4.54	5.34	7.11	8.72
12	3.08	4.07	4.95	5.83	7.75	9.54
13	3.34	4.41	5.36	6.32	8.48	10.31
14	3.59	4.74	5.77	6.81	9.05	11.05
15	3.84	5.08	6.18	7.28	9.70	11.80
16	4.11	5.42	6.60	7.78	10.34	12.65
17	4.36	5.77	7.02	8.25	11.08	13.47
18	4.63	6.10	7.43	8.76	11.64	14.32
19	4.89	6.44	7.84	9.25	12.29	15.09
20	5.15	6.78	8.25	9.73	12.93	15.85
22	5.65	7.46	9.08	10.71	14.23	17.50
24	6.16	8.14	9.91	11.68	15.52	19.00
26	6.67	8.82	10.73	12.66	16.82	20.70
28	7.18	9.50	11.56	13.63	18.11	22.20
30	7.71	10.18	12.38	14.60	19.41	23.90
32	8.22	10.84	13.21	15.58	20.71	25.50
34	8.72	11.54	14.04	16.51	21.97	27.08
36	9.27	12.20	14.90	17.53	23.29	28.80
38	9.73	12.88	15.67	18.46	24.51	30.26
40	10.30	13.56	16.50	19.48	25.88	31.75
42	10.77	14.25	17.32	20.40	27.21	33.47
44	11.35	14.91	18.16	21.42	28.47	35.00
46	11.86	15.59	18.99	22.39	29.77	36.65
48	12.36	16.26	19.82	23.36	31.06	38.30
50	12.88	16.69	20.63	24.33	32.37	39.94
52	13.39	17.12	21.44	25.30	33.68	41.58
54	13.91	18.05	22.26	26.28	34.98	43.18
56	14.42	18.98	23.08	27.25	36.27	44.78
58	14.94	19.65	23.91	28.23	37.56	46.38
60	15.45	20.34	24.73	29.20	38.84	47.97

Spiral Pipe - Clutcher Size Calculation Chart - Table A-24						
Spread Horseshoe at 60° Hanging Configuration - 5' Hanger Spacing						
Diameter (Inches)	Approx. Single Wall Spiral Pipe Weight/Lbs. per Linear Foot					
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	16 gauge
3	0.76	1.01	1.23	1.48		
4	1.02	1.35	1.64	1.94		
5	1.28	1.69	2.06	2.42		
6	1.54	2.03	2.47	2.91	3.88	4.76
7	1.79	2.37	2.88	3.40	4.52	5.58
8	2.05	2.71	3.29	3.86	5.17	6.34
9	2.31	3.05	3.71	4.37	5.82	7.18
10	2.57	3.39	4.12	4.86	6.47	7.92
11	2.82	3.73	4.54	5.34	7.11	8.72
12	3.08	4.07	4.95	5.83	7.75	9.54
13	3.34	4.41	5.36	6.32	8.48	10.31
14	3.59	4.74	5.77	6.81	9.05	11.05
15	3.84	5.08	6.18	7.28	9.70	11.80
16	4.11	5.42	6.60	7.78	10.34	12.65
17	4.36	5.77	7.02	8.25	11.08	13.47
18	4.63	6.10	7.43	8.76	11.64	14.32
19	4.89	6.44	7.84	9.25	12.29	15.09
20	5.15	6.78	8.25	9.73	12.93	15.85
22	5.65	7.46	9.08	10.71	14.23	17.50
24	6.16	8.14	9.91	11.68	15.52	19.00
26	6.67	8.82	10.73	12.66	16.82	20.70
28	7.18	9.50	11.56	13.63	18.11	22.20
30	7.71	10.18	12.38	14.60	19.41	23.90
32	8.22	10.84	13.21	15.58	20.71	25.50
34	8.72	11.54	14.04	16.51	21.97	27.08
36	9.27	12.20	14.90	17.53	23.29	28.80
38	9.73	12.88	15.67	18.46	24.51	30.26
40	10.30	13.56	16.50	19.48	25.88	31.75
42	10.77	14.25	17.32	20.40	27.21	33.47
44	11.35	14.91	18.16	21.42	28.47	35.00
46	11.86	15.59	18.99	22.39	29.77	36.65
48	12.36	16.26	19.82	23.36	31.06	38.30
50	12.88	16.69	20.63	24.33	32.37	39.94
52	13.39	17.12	21.44	25.30	33.68	41.58
54	13.91	18.05	22.26	26.28	34.98	43.18
56	14.42	18.98	23.08	27.25	36.27	44.78
58	14.94	19.65	23.91	28.23	37.56	46.38
60	15.45	20.34	24.73	29.20	38.84	47.97

Spiral Pipe - Clutcher Size Calculation Chart - Table A-25						
Loop Hanging Configuration - 12' Hanger Spacing						
Diameter (Inches)	Approx. Single Wall Spiral Pipe Weight/Lbs. per Linear Foot					
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	16 gauge
3	0.76	1.01	1.23	1.48		
4	1.02	1.35	1.64	1.94		
5	1.28	1.69	2.06	2.42		
6	1.54	2.03	2.47	2.91	3.88	4.76
7	1.79	2.37	2.88	3.40	4.52	5.58
8	2.05	2.71	3.29	3.86	5.17	6.34
9	2.31	3.05	3.71	4.37	5.82	7.18
10	2.57	3.39	4.12	4.86	6.47	7.92
11	2.82	3.73	4.54	5.34	7.11	8.72
12	3.08	4.07	4.95	5.83	7.75	9.54
13	3.34	4.41	5.36	6.32	8.48	10.31
14	3.59	4.74	5.77	6.81	9.05	11.05
15	3.84	5.08	6.18	7.28	9.70	11.80
16	4.11	5.42	6.60	7.78	10.34	12.65
17	4.36	5.77	7.02	8.25	11.08	13.47
18	4.63	6.10	7.43	8.76	11.64	14.32

Spiral Pipe - Clutcher Size Calculation Chart - Table A-26						
Loop Hanging Configuration - 10' Hanger Spacing						
Diameter (Inches)	Approx. Single Wall Spiral Pipe Weight/Lbs. per Linear Foot					
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	16 gauge
3	0.76	1.01	1.23	1.48		
4	1.02	1.35	1.64	1.94		
5	1.28	1.69	2.06	2.42		
6	1.54	2.03	2.47	2.91	3.88	4.76
7	1.79	2.37	2.88	3.40	4.52	5.58
8	2.05	2.71	3.29	3.86	5.17	6.34
9	2.31	3.05	3.71	4.37	5.82	7.18
10	2.57	3.39	4.12	4.86	6.47	7.92
11	2.82	3.73	4.54	5.34	7.11	8.72
12	3.08	4.07	4.95	5.83	7.75	9.54
13	3.34	4.41	5.36	6.32	8.48	10.31
14	3.59	4.74	5.77	6.81	9.05	11.05
15	3.84	5.08	6.18	7.28	9.70	11.80
16	4.11	5.42	6.60	7.78	10.34	12.65
17	4.36	5.77	7.02	8.25	11.08	13.47
18	4.63	6.10	7.43	8.76	11.64	14.32

Spiral Pipe - Clutcher Size Calculation Chart - Table A-27						
Loop Hanging Configuration - 6' Hanger Spacing						
Diameter (Inches)	Approx. Single Wall Spiral Pipe Weight/Lbs. per Linear Foot					
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	16 gauge
3	0.76	1.01	1.23	1.48		
4	1.02	1.35	1.64	1.94		
5	1.28	1.69	2.06	2.42		
6	1.54	2.03	2.47	2.91	3.88	4.76
7	1.79	2.37	2.88	3.40	4.52	5.58
8	2.05	2.71	3.29	3.86	5.17	6.34
9	2.31	3.05	3.71	4.37	5.82	7.18
10	2.57	3.39	4.12	4.86	6.47	7.92
11	2.82	3.73	4.54	5.34	7.11	8.72
12	3.08	4.07	4.95	5.83	7.75	9.54
13	3.34	4.41	5.36	6.32	8.48	10.31
14	3.59	4.74	5.77	6.81	9.05	11.05
15	3.84	5.08	6.18	7.28	9.70	11.80
16	4.11	5.42	6.60	7.78	10.34	12.65
17	4.36	5.77	7.02	8.25	11.08	13.47
18	4.63	6.10	7.43	8.76	11.64	14.32

Spiral Pipe - Clutcher Size Calculation Chart - Table A-28						
Loop Hanging Configuration - 5' Hanger Spacing						
Diameter (Inches)	Approx. Single Wall Spiral Pipe Weight/Lbs. per Linear Foot					
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	16 gauge
3	0.76	1.01	1.23	1.48		
4	1.02	1.35	1.64	1.94		
5	1.28	1.69	2.06	2.42		
6	1.54	2.03	2.47	2.91	3.88	4.76
7	1.79	2.37	2.88	3.40	4.52	5.58
8	2.05	2.71	3.29	3.86	5.17	6.34
9	2.31	3.05	3.71	4.37	5.82	7.18
10	2.57	3.39	4.12	4.86	6.47	7.92
11	2.82	3.73	4.54	5.34	7.11	8.72
12	3.08	4.07	4.95	5.83	7.75	9.54
13	3.34	4.41	5.36	6.32	8.48	10.31
14	3.59	4.74	5.77	6.81	9.05	11.05
15	3.84	5.08	6.18	7.28	9.70	11.80
16	4.11	5.42	6.60	7.78	10.34	12.65
17	4.36	5.77	7.02	8.25	11.08	13.47
18	4.63	6.10	7.43	8.76	11.64	14.32

Notes:

a. Maximum hanger spacing of 12 ft is per SMACNA HVAC Duct Construction Standards Metal and Flexible Third Edition.
b. Tables include a 15% weight increase to allow for variation and simple connectors.
c. Load on the Clutchers must be evenly distributed.
d. Never use Clutchers for lifting spiral pipe.
e. Always check to ensure locking mechanism is fully engaged.
f. Load must be fully supported before adjusting Clutcher.

Appendix B

Rectangular Duct

Rectangular Duct Charts				
Hanging Configuration	**12 ft. Spacing**	**10 ft. Spacing**	**6 ft. Spacing**	**5 ft. Spacing**
Standard Horseshoe	Table B-1	Table B-2	Table B-3	Table B-4
Spread Horseshoe at 15°	Table B-5	Table B-6	Table B-7	Table B-8
Spread Horseshoe at 30°	Table B-9	Table B-10	Table B-11	Table B-12
Spread Horseshoe at 45°	Table B-13	Table B-14	Table B-15	Table B-16
Spread Horseshoe at 60°	Table B-17	Table B-18	Table B-19	Table B-20

Single Wall Rectangular Duct - Clutcher Size Calculation Chart - Table B-1											
Standard Horseshoe Hanging Configuration - 12' Hanger Spacing											
Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot					Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot				
(Inches)	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge	(Inches)	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge
12	2.14	2.73	3.12	3.67	4.77	67	10.70	13.64	16.60	19.55	25.45
13	2.30	2.93	3.35	3.95	5.14	68	10.85	13.84	16.84	19.83	25.82
14	2.45	3.12	3.60	4.24	5.52	69	11.00	14.04	17.08	20.12	26.20
15	2.60	3.32	3.84	4.52	5.89	70	11.16	14.25	17.33	20.41	26.58
16	2.76	3.53	4.08	4.80	6.25	71	11.31	14.44	17.56	20.69	26.95
17	2.91	3.72	4.32	5.09	6.63	72	11.47	14.64	17.80	20.98	27.32
18	3.07	3.92	4.57	5.37	6.99	73	11.62	14.84	18.04	21.26	27.68
19	3.23	4.12	4.80	2.66	7.36	74	11.78	15.04	18.29	21.55	28.05
20	3.38	4.31	5.25	6.19	8.06	75	11.94	15.24	18.54	21.83	28.42
21	3.59	4.52	5.50	6.48	8.43	76	12.10	15.44	18.79	22.12	28.80
22	3.70	4.72	5.74	6.76	8.81	77	12.25	15.63	19.02	22.40	29.16
23	3.86	4.92	5.98	7.05	9.19	78	12.41	15.83	19.26	22.68	29.53
24	4.10	5.11	6.23	7.33	9.54	79	12.56	16.03	19.49	22.96	29.90
25	4.16	5.31	6.47	7.61	9.91	80	12.72	16.23	19.73	23.25	30.27
26	4.31	5.51	6.70	7.90	10.28	81	12.88	16.42	19.98	23.53	30.64
27	4.47	5.72	6.95	8.19	10.66	82	13.04	16.62	20.23	23.82	31.02
28	4.64	5.92	7.19	8.47	11.04	83	13.19	16.82	20.47	24.10	31.38
29	4.79	6.12	7.44	8.76	11.40	84	13.35	17.03	20.71	24.39	31.75
30	4.94	6.31	7.67	9.04	11.77	85	13.50	17.22	20.95	24.67	32.13
31	5.11	6.51	7.91	9.32	12.13	86	13.65	17.42	21.19	24.96	32.49
32	5.25	6.71	8.15	9.60	12.50	87	13.81	17.62	21.43	25.24	32.87
33	5.41	6.90	8.39	9.89	12.88	88	13.97	17.83	21.68	25.53	33.25
34	5.57	7.10	8.64	10.18	13.26	89	14.12	18.02	21.92	25.81	33.61
35	5.72	7.30	8.88	10.46	13.62	90	14.28	18.22	22.16	26.10	33.98
36	5.88	7.50	9.13	10.74	13.98	91	14.43	18.41	22.40	26.38	34.37
37	6.04	7.69	9.36	11.02	14.35	92	14.58	18.61	22.64	26.66	34.71
38	6.19	7.89	9.60	11.31	14.72	93	14.74	18.81	22.88	26.95	35.08
39	6.34	8.11	9.85	11.60	15.10	94	14.90	19.01	23.12	27.24	35.46
40	6.50	8.30	10.09	11.88	15.48	95	15.05	19.21	23.36	27.52	35.82
41	6.65	8.50	10.33	12.16	15.84	96	15.21	19.41	23.61	27.80	36.19
42	6.81	8.69	10.56	12.45	16.21	97	15.36	19.60	23.84	28.08	36.56
43	6.96	8.88	10.80	12.73	16.57	98	15.52	19.80	24.08	28.37	36.93
44	7.12	9.08	11.05	13.02	16.94	99	15.67	20.00	24.33	28.65	37.31
45	7.27	9.28	11.29	13.31	17.32	100	15.83	20.21	24.58	28.94	37.69
46	7.43	9.48	11.54	13.60	17.70	101	15.98	20.40	24.81	29.22	38.05
47	7.59	9.68	11.78	13.87	18.06	102	16.14	20.60	25.05	29.51	38.42
48	7.75	9.88	12.02	14.15	18.42	103	16.29	20.79	25.29	29.79	38.78
49	7.90	10.08	12.25	14.43	18.79	104	16.45	20.99	25.53	30.08	39.15
50	8.05	10.28	12.49	14.72	19.17	105	16.61	21.19	25.78	30.36	39.52
51	8.27	10.48	12.93	15.00	19.54	106	16.77	21.39	26.03	30.65	39.90
52	8.37	10.68	12.98	15.29	19.92	107	16.92	21.58	26.26	30.93	40.26
53	8.52	10.87	13.22	15.57	20.28	108	17.07	21.78	26.50	31.21	40.63
54	8.68	11.07	13.47	15.86	20.65	109	17.23	21.98	26.74	31.49	41.00
55	8.83	11.26	13.70	16.14	21.01	110	17.39	22.18	26.98	31.78	41.38
56	8.98	11.46	13.94	16.42	21.38	111	17.55	22.38	27.22	32.06	41.75
57	9.14	11.66	14.19	16.71	21.76	112	17.71	22.59	27.47	32.35	42.13
58	9.3	11.87	14.44	17.00	22.14	113	17.86	22.78	27.71	32.63	42.49
59	9.45	12.07	14.67	17.28	22.50	114	18.01	22.98	27.95	32.92	42.86
60	9.61	12.27	14.91	17.57	22.87	115	18.16	23.17	28.19	33.20	43.22
61	9.76	12.46	15.15	17.84	23.24	116	18.31	23.37	28.43	33.48	43.59
62	9.92	12.65	15.40	18.12	23.61	117	18.47	23.57	28.67	33.77	43.97
63	10.08	12.85	15.64	18.41	23.98	118	18.63	23.78	28.92	34.06	44.35
64	10.24	13.06	15.88	18.71	24.36	119	18.79	23.98	29.16	34.35	44.72
65	10.39	13.25	16.12	18.99	24.72	120	18.95	24.18	29.40	34.63	45.09
66	10.55	13.45	16.36	19.27	25.09						

Single Wall Rectangular Duct - Clutcher Size Calculation Chart - Table B-2												
Standard Horseshoe Hanging Configuration - 10' Hanger Spacing												
Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot						Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot				
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge			26 gauge	24 gauge	22 gauge	20 gauge	18 gauge
12	2.14	2.73	3.12	3.67	4.77		67	10.70	13.64	16.60	19.55	25.45
13	2.30	2.93	3.35	3.95	5.14		68	10.85	13.84	16.84	19.83	25.82
14	2.45	3.12	3.60	4.24	5.52		69	11.00	14.04	17.08	20.12	26.20
15	2.60	3.32	3.84	4.52	5.89		70	11.16	14.25	17.33	20.41	26.58
16	2.76	3.53	4.08	4.80	6.25		71	11.31	14.44	17.56	20.69	26.95
17	2.91	3.72	4.32	5.09	6.63		72	11.47	14.64	17.80	20.98	27.32
18	3.07	3.92	4.57	5.37	6.99		73	11.62	14.84	18.04	21.26	27.68
19	3.23	4.12	4.80	2.66	7.36		74	11.78	15.04	18.29	21.55	28.05
20	3.38	4.31	5.25	6.19	8.06		75	11.94	15.24	18.54	21.83	28.42
21	3.59	4.52	5.50	6.48	8.43		76	12.10	15.44	18.79	22.12	28.80
22	3.70	4.72	5.74	6.76	8.81		77	12.25	15.63	19.02	22.40	29.16
23	3.86	4.92	5.98	7.05	9.19		78	12.41	15.83	19.26	22.68	29.53
24	4.10	5.11	6.23	7.33	9.54		79	12.56	16.03	19.49	22.96	29.90
25	4.16	5.31	6.47	7.61	9.91		80	12.72	16.23	19.73	23.25	30.27
26	4.31	5.51	6.70	7.90	10.28		81	12.88	16.42	19.98	23.53	30.64
27	4.47	5.72	6.95	8.19	10.66		82	13.04	16.62	20.23	23.82	31.02
28	4.64	5.92	7.19	8.47	11.04		83	13.19	16.82	20.47	24.10	31.38
29	4.79	6.12	7.44	8.76	11.40		84	13.35	17.03	20.71	24.39	31.75
30	4.94	6.31	7.67	9.04	11.77		85	13.50	17.22	20.95	24.67	32.13
31	5.11	6.51	7.91	9.32	12.13		86	13.65	17.42	21.19	24.96	32.49
32	5.25	6.71	8.15	9.60	12.50		87	13.81	17.62	21.43	25.24	32.87
33	5.41	6.90	8.39	9.89	12.88		88	13.97	17.83	21.68	25.53	33.25
34	5.57	7.10	8.64	10.18	13.26		89	14.12	18.02	21.92	25.81	33.61
35	5.72	7.30	8.88	10.46	13.62		90	14.28	18.22	22.16	26.10	33.98
36	5.88	7.50	9.13	10.74	13.98		91	14.43	18.41	22.40	26.38	34.37
37	6.04	7.69	9.36	11.02	14.35		92	14.58	18.61	22.64	26.66	34.71
38	6.19	7.89	9.60	11.31	14.72		93	14.74	18.81	22.88	26.95	35.08
39	6.34	8.11	9.85	11.60	15.10		94	14.90	19.01	23.12	27.24	35.46
40	6.50	8.30	10.09	11.88	15.48		95	15.05	19.21	23.36	27.52	35.82
41	6.65	8.50	10.33	12.16	15.84		96	15.21	19.41	23.61	27.80	36.19
42	6.81	8.69	10.56	12.45	16.21		97	15.36	19.60	23.84	28.08	36.56
43	6.96	8.88	10.80	12.73	16.57		98	15.52	19.80	24.08	28.37	36.93
44	7.12	9.08	11.05	13.02	16.94		99	15.67	20.00	24.33	28.65	37.31
45	7.27	9.28	11.29	13.31	17.32		100	15.83	20.21	24.58	28.94	37.69
46	7.43	9.48	11.54	13.60	17.70		101	15.98	20.40	24.81	29.22	38.05
47	7.59	9.68	11.78	13.87	18.06		102	16.14	20.60	25.05	29.51	38.42
48	7.75	9.88	12.02	14.15	18.42		103	16.29	20.79	25.29	29.79	38.78
49	7.90	10.08	12.25	14.43	18.79		104	16.45	20.99	25.53	30.08	39.15
50	8.05	10.28	12.49	14.72	19.17		105	16.61	21.19	25.78	30.36	39.52
51	8.27	10.48	12.93	15.00	19.54		106	16.77	21.39	26.03	30.65	39.90
52	8.37	10.68	12.98	15.29	19.92		107	16.92	21.58	26.26	30.93	40.26
53	8.52	10.87	13.22	15.57	20.28		108	17.07	21.78	26.50	31.21	40.63
54	8.68	11.07	13.47	15.86	20.65		109	17.23	21.98	26.74	31.49	41.00
55	8.83	11.26	13.70	16.14	21.01		110	17.39	22.18	26.98	31.78	41.38
56	8.98	11.46	13.94	16.42	21.38		111	17.55	22.38	27.22	32.06	41.75
57	9.14	11.66	14.19	16.71	21.76		112	17.71	22.59	27.47	32.35	42.13
58	9.3	11.87	14.44	17.00	22.14		113	17.86	22.78	27.71	32.63	42.49
59	9.45	12.07	14.67	17.28	22.50		114	18.01	22.98	27.95	32.92	42.86
60	9.61	12.27	14.91	17.57	22.87		115	18.16	23.17	28.19	33.20	43.22
61	9.76	12.46	15.15	17.84	23.24		116	18.31	23.37	28.43	33.48	43.59
62	9.92	12.65	15.40	18.12	23.61		117	18.47	23.57	28.67	33.77	43.97
63	10.08	12.85	15.64	18.41	23.98		118	18.63	23.78	28.92	34.06	44.35
64	10.24	13.06	15.88	18.71	24.36		119	18.79	23.98	29.16	34.35	44.72
65	10.39	13.25	16.12	18.99	24.72		120	18.95	24.18	29.40	34.63	45.09
66	10.55	13.45	16.36	19.27	25.09							

Single Wall Rectangular Duct - Clutcher Size Calculation Chart - Table B-3												
Standard Horseshoe Hanging Configuration - 6' Hanger Spacing												
Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot						Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot				
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge			26 gauge	24 gauge	22 gauge	20 gauge	18 gauge
12	2.14	2.73	3.12	3.67	4.77		67	10.70	13.64	16.60	19.55	25.45
13	2.30	2.93	3.35	3.95	5.14		68	10.85	13.84	16.84	19.83	25.82
14	2.45	3.12	3.60	4.24	5.52		69	11.00	14.04	17.08	20.12	26.20
15	2.60	3.32	3.84	4.52	5.89		70	11.16	14.25	17.33	20.41	26.58
16	2.76	3.53	4.08	4.80	6.25		71	11.31	14.44	17.56	20.69	26.95
17	2.91	3.72	4.32	5.09	6.63		72	11.47	14.64	17.80	20.98	27.32
18	3.07	3.92	4.57	5.37	6.99		73	11.62	14.84	18.04	21.26	27.68
19	3.23	4.12	4.80	2.66	7.36		74	11.78	15.04	18.29	21.55	28.05
20	3.38	4.31	5.25	6.19	8.06		75	11.94	15.24	18.54	21.83	28.42
21	3.59	4.52	5.50	6.48	8.43		76	12.10	15.44	18.79	22.12	28.80
22	3.70	4.72	5.74	6.76	8.81		77	12.25	15.63	19.02	22.40	29.16
23	3.86	4.92	5.98	7.05	9.19		78	12.41	15.83	19.26	22.68	29.53
24	4.10	5.11	6.23	7.33	9.54		79	12.56	16.03	19.49	22.96	29.90
25	4.16	5.31	6.47	7.61	9.91		80	12.72	16.23	19.73	23.25	30.27
26	4.31	5.51	6.70	7.90	10.28		81	12.88	16.42	19.98	23.53	30.64
27	4.47	5.72	6.95	8.19	10.66		82	13.04	16.62	20.23	23.82	31.02
28	4.64	5.92	7.19	8.47	11.04		83	13.19	16.82	20.47	24.10	31.38
29	4.79	6.12	7.44	8.76	11.40		84	13.35	17.03	20.71	24.39	31.75
30	4.94	6.31	7.67	9.04	11.77		85	13.50	17.22	20.95	24.67	32.13
31	5.11	6.51	7.91	9.32	12.13		86	13.65	17.42	21.19	24.96	32.49
32	5.25	6.71	8.15	9.60	12.50		87	13.81	17.62	21.43	25.24	32.87
33	5.41	6.90	8.39	9.89	12.88		88	13.97	17.83	21.68	25.53	33.25
34	5.57	7.10	8.64	10.18	13.26		89	14.12	18.02	21.92	25.81	33.61
35	5.72	7.30	8.88	10.46	13.62		90	14.28	18.22	22.16	26.10	33.98
36	5.88	7.50	9.13	10.74	13.98		91	14.43	18.41	22.40	26.38	34.37
37	6.04	7.69	9.36	11.02	14.35		92	14.58	18.61	22.64	26.66	34.71
38	6.19	7.89	9.60	11.31	14.72		93	14.74	18.81	22.88	26.95	35.08
39	6.34	8.11	9.85	11.60	15.10		94	14.90	19.01	23.12	27.24	35.46
40	6.50	8.30	10.09	11.88	15.48		95	15.05	19.21	23.36	27.52	35.82
41	6.65	8.50	10.33	12.16	15.84		96	15.21	19.41	23.61	27.80	36.19
42	6.81	8.69	10.56	12.45	16.21		97	15.36	19.60	23.84	28.08	36.56
43	6.96	8.88	10.80	12.73	16.57		98	15.52	19.80	24.08	28.37	36.93
44	7.12	9.08	11.05	13.02	16.94		99	15.67	20.00	24.33	28.65	37.31
45	7.27	9.28	11.29	13.31	17.32		100	15.83	20.21	24.58	28.94	37.69
46	7.43	9.48	11.54	13.60	17.70		101	15.98	20.40	24.81	29.22	38.05
47	7.59	9.68	11.78	13.87	18.06		102	16.14	20.60	25.05	29.51	38.42
48	7.75	9.88	12.02	14.15	18.42		103	16.29	20.79	25.29	29.79	38.78
49	7.90	10.08	12.25	14.43	18.79		104	16.45	20.99	25.53	30.08	39.15
50	8.05	10.28	12.49	14.72	19.17		105	16.61	21.19	25.78	30.36	39.52
51	8.27	10.48	12.93	15.00	19.54		106	16.77	21.39	26.03	30.65	39.90
52	8.37	10.68	12.98	15.29	19.92		107	16.92	21.58	26.26	30.93	40.26
53	8.52	10.87	13.22	15.57	20.28		108	17.07	21.78	26.50	31.21	40.63
54	8.68	11.07	13.47	15.86	20.65		109	17.23	21.98	26.74	31.49	41.00
55	8.83	11.26	13.70	16.14	21.01		110	17.39	22.18	26.98	31.78	41.38
56	8.98	11.46	13.94	16.42	21.38		111	17.55	22.38	27.22	32.06	41.75
57	9.14	11.66	14.19	16.71	21.76		112	17.71	22.59	27.47	32.35	42.13
58	9.3	11.87	14.44	17.00	22.14		113	17.86	22.78	27.71	32.63	42.49
59	9.45	12.07	14.67	17.28	22.50		114	18.01	22.98	27.95	32.92	42.86
60	9.61	12.27	14.91	17.57	22.87		115	18.16	23.17	28.19	33.20	43.22
61	9.76	12.46	15.15	17.84	23.24		116	18.31	23.37	28.43	33.48	43.59
62	9.92	12.65	15.40	18.12	23.61		117	18.47	23.57	28.67	33.77	43.97
63	10.08	12.85	15.64	18.41	23.98		118	18.63	23.78	28.92	34.06	44.35
64	10.24	13.06	15.88	18.71	24.36		119	18.79	23.98	29.16	34.35	44.72
65	10.39	13.25	16.12	18.99	24.72		120	18.95	24.18	29.40	34.63	45.09
66	10.55	13.45	16.36	19.27	25.09							

Single Wall Rectangular Duct - Clutcher Size Calculation Chart - Table B-4												
Standard Horseshoe Hanging Configuration - 5' Hanger Spacing												
Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot						Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot				
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge			26 gauge	24 gauge	22 gauge	20 gauge	18 gauge
12	2.14	2.73	3.12	3.67	4.77		67	10.70	13.64	16.60	19.55	25.45
13	2.30	2.93	3.35	3.95	5.14		68	10.85	13.84	16.84	19.83	25.82
14	2.45	3.12	3.60	4.24	5.52		69	11.00	14.04	17.08	20.12	26.20
15	2.60	3.32	3.84	4.52	5.89		70	11.16	14.25	17.33	20.41	26.58
16	2.76	3.53	4.08	4.80	6.25		71	11.31	14.44	17.56	20.69	26.95
17	2.91	3.72	4.32	5.09	6.63		72	11.47	14.64	17.80	20.98	27.32
18	3.07	3.92	4.57	5.37	6.99		73	11.62	14.84	18.04	21.26	27.68
19	3.23	4.12	4.80	2.66	7.36		74	11.78	15.04	18.29	21.55	28.05
20	3.38	4.31	5.25	6.19	8.06		75	11.94	15.24	18.54	21.83	28.42
21	3.59	4.52	5.50	6.48	8.43		76	12.10	15.44	18.79	22.12	28.80
22	3.70	4.72	5.74	6.76	8.81		77	12.25	15.63	19.02	22.40	29.16
23	3.86	4.92	5.98	7.05	9.19		78	12.41	15.83	19.26	22.68	29.53
24	4.10	5.11	6.23	7.33	9.54		79	12.56	16.03	19.49	22.96	29.90
25	4.16	5.31	6.47	7.61	9.91		80	12.72	16.23	19.73	23.25	30.27
26	4.31	5.51	6.70	7.90	10.28		81	12.88	16.42	19.98	23.53	30.64
27	4.47	5.72	6.95	8.19	10.66		82	13.04	16.62	20.23	23.82	31.02
28	4.64	5.92	7.19	8.47	11.04		83	13.19	16.82	20.47	24.10	31.38
29	4.79	6.12	7.44	8.76	11.40		84	13.35	17.03	20.71	24.39	31.75
30	4.94	6.31	7.67	9.04	11.77		85	13.50	17.22	20.95	24.67	32.13
31	5.11	6.51	7.91	9.32	12.13		86	13.65	17.42	21.19	24.96	32.49
32	5.25	6.71	8.15	9.60	12.50		87	13.81	17.62	21.43	25.24	32.87
33	5.41	6.90	8.39	9.89	12.88		88	13.97	17.83	21.68	25.53	33.25
34	5.57	7.10	8.64	10.18	13.26		89	14.12	18.02	21.92	25.81	33.61
35	5.72	7.30	8.88	10.46	13.62		90	14.28	18.22	22.16	26.10	33.98
36	5.88	7.50	9.13	10.74	13.98		91	14.43	18.41	22.40	26.38	34.37
37	6.04	7.69	9.36	11.02	14.35		92	14.58	18.61	22.64	26.66	34.71
38	6.19	7.89	9.60	11.31	14.72		93	14.74	18.81	22.88	26.95	35.08
39	6.34	8.11	9.85	11.60	15.10		94	14.90	19.01	23.12	27.24	35.46
40	6.50	8.30	10.09	11.88	15.48		95	15.05	19.21	23.36	27.52	35.82
41	6.65	8.50	10.33	12.16	15.84		96	15.21	19.41	23.61	27.80	36.19
42	6.81	8.69	10.56	12.45	16.21		97	15.36	19.60	23.84	28.08	36.56
43	6.96	8.88	10.80	12.73	16.57		98	15.52	19.80	24.08	28.37	36.93
44	7.12	9.08	11.05	13.02	16.94		99	15.67	20.00	24.33	28.65	37.31
45	7.27	9.28	11.29	13.31	17.32		100	15.83	20.21	24.58	28.94	37.69
46	7.43	9.48	11.54	13.60	17.70		101	15.98	20.40	24.81	29.22	38.05
47	7.59	9.68	11.78	13.87	18.06		102	16.14	20.60	25.05	29.51	38.42
48	7.75	9.88	12.02	14.15	18.42		103	16.29	20.79	25.29	29.79	38.78
49	7.90	10.08	12.25	14.43	18.79		104	16.45	20.99	25.53	30.08	39.15
50	8.05	10.28	12.49	14.72	19.17		105	16.61	21.19	25.78	30.36	39.52
51	8.27	10.48	12.93	15.00	19.54		106	16.77	21.39	26.03	30.65	39.90
52	8.37	10.68	12.98	15.29	19.92		107	16.92	21.58	26.26	30.93	40.26
53	8.52	10.87	13.22	15.57	20.28		108	17.07	21.78	26.50	31.21	40.63
54	8.68	11.07	13.47	15.86	20.65		109	17.23	21.98	26.74	31.49	41.00
55	8.83	11.26	13.70	16.14	21.01		110	17.39	22.18	26.98	31.78	41.38
56	8.98	11.46	13.94	16.42	21.38		111	17.55	22.38	27.22	32.06	41.75
57	9.14	11.66	14.19	16.71	21.76		112	17.71	22.59	27.47	32.35	42.13
58	9.3	11.87	14.44	17.00	22.14		113	17.86	22.78	27.71	32.63	42.49
59	9.45	12.07	14.67	17.28	22.50		114	18.01	22.98	27.95	32.92	42.86
60	9.61	12.27	14.91	17.57	22.87		115	18.16	23.17	28.19	33.20	43.22
61	9.76	12.46	15.15	17.84	23.24		116	18.31	23.37	28.43	33.48	43.59
62	9.92	12.65	15.40	18.12	23.61		117	18.47	23.57	28.67	33.77	43.97
63	10.08	12.85	15.64	18.41	23.98		118	18.63	23.78	28.92	34.06	44.35
64	10.24	13.06	15.88	18.71	24.36		119	18.79	23.98	29.16	34.35	44.72
65	10.39	13.25	16.12	18.99	24.72		120	18.95	24.18	29.40	34.63	45.09
66	10.55	13.45	16.36	19.27	25.09							

Single Wall Rectangular Duct - Clutcher Size Calculation Chart - Table B-5												
Spread Horseshoe at 15° Hanging Configuration - 12' Hanger Spacing												
Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot						Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot				
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge			26 gauge	24 gauge	22 gauge	20 gauge	18 gauge
12	2.14	2.73	3.12	3.67	4.77		67	10.70	13.64	16.60	19.55	25.45
13	2.30	2.93	3.35	3.95	5.14		68	10.85	13.84	16.84	19.83	25.82
14	2.45	3.12	3.60	4.24	5.52		69	11.00	14.04	17.08	20.12	26.20
15	2.60	3.32	3.84	4.52	5.89		70	11.16	14.25	17.33	20.41	26.58
16	2.76	3.53	4.08	4.80	6.25		71	11.31	14.44	17.56	20.69	26.95
17	2.91	3.72	4.32	5.09	6.63		72	11.47	14.64	17.80	20.98	27.32
18	3.07	3.92	4.57	5.37	6.99		73	11.62	14.84	18.04	21.26	27.68
19	3.23	4.12	4.80	2.66	7.36		74	11.78	15.04	18.29	21.55	28.05
20	3.38	4.31	5.25	6.19	8.06		75	11.94	15.24	18.54	21.83	28.42
21	3.59	4.52	5.50	6.48	8.43		76	12.10	15.44	18.79	22.12	28.80
22	3.70	4.72	5.74	6.76	8.81		77	12.25	15.63	19.02	22.40	29.16
23	3.86	4.92	5.98	7.05	9.19		78	12.41	15.83	19.26	22.68	29.53
24	4.10	5.11	6.23	7.33	9.54		79	12.56	16.03	19.49	22.96	29.90
25	4.16	5.31	6.47	7.61	9.91		80	12.72	16.23	19.73	23.25	30.27
26	4.31	5.51	6.70	7.90	10.28		81	12.88	16.42	19.98	23.53	30.64
27	4.47	5.72	6.95	8.19	10.66		82	13.04	16.62	20.23	23.82	31.02
28	4.64	5.92	7.19	8.47	11.04		83	13.19	16.82	20.47	24.10	31.38
29	4.79	6.12	7.44	8.76	11.40		84	13.35	17.03	20.71	24.39	31.75
30	4.94	6.31	7.67	9.04	11.77		85	13.50	17.22	20.95	24.67	32.13
31	5.11	6.51	7.91	9.32	12.13		86	13.65	17.42	21.19	24.96	32.49
32	5.25	6.71	8.15	9.60	12.50		87	13.81	17.62	21.43	25.24	32.87
33	5.41	6.90	8.39	9.89	12.88		88	13.97	17.83	21.68	25.53	33.25
34	5.57	7.10	8.64	10.18	13.26		89	14.12	18.02	21.92	25.81	33.61
35	5.72	7.30	8.88	10.46	13.62		90	14.28	18.22	22.16	26.10	33.98
36	5.88	7.50	9.13	10.74	13.98		91	14.43	18.41	22.40	26.38	34.37
37	6.04	7.69	9.36	11.02	14.35		92	14.58	18.61	22.64	26.66	34.71
38	6.19	7.89	9.60	11.31	14.72		93	14.74	18.81	22.88	26.95	35.08
39	6.34	8.11	9.85	11.60	15.10		94	14.90	19.01	23.12	27.24	35.46
40	6.50	8.30	10.09	11.88	15.48		95	15.05	19.21	23.36	27.52	35.82
41	6.65	8.50	10.33	12.16	15.84		96	15.21	19.41	23.61	27.80	36.19
42	6.81	8.69	10.56	12.45	16.21		97	15.36	19.60	23.84	28.08	36.56
43	6.96	8.88	10.80	12.73	16.57		98	15.52	19.80	24.08	28.37	36.93
44	7.12	9.08	11.05	13.02	16.94		99	15.67	20.00	24.33	28.65	37.31
45	7.27	9.28	11.29	13.31	17.32		100	15.83	20.21	24.58	28.94	37.69
46	7.43	9.48	11.54	13.60	17.70		101	15.98	20.40	24.81	29.22	38.05
47	7.59	9.68	11.78	13.87	18.06		102	16.14	20.60	25.05	29.51	38.42
48	7.75	9.88	12.02	14.15	18.42		103	16.29	20.79	25.29	29.79	38.78
49	7.90	10.08	12.25	14.43	18.79		104	16.45	20.99	25.53	30.08	39.15
50	8.05	10.28	12.49	14.72	19.17		105	16.61	21.19	25.78	30.36	39.52
51	8.27	10.48	12.93	15.00	19.54		106	16.77	21.39	26.03	30.65	39.90
52	8.37	10.68	12.98	15.29	19.92		107	16.92	21.58	26.26	30.93	40.26
53	8.52	10.87	13.22	15.57	20.28		108	17.07	21.78	26.50	31.21	40.63
54	8.68	11.07	13.47	15.86	20.65		109	17.23	21.98	26.74	31.49	41.00
55	8.83	11.26	13.70	16.14	21.01		110	17.39	22.18	26.98	31.78	41.38
56	8.98	11.46	13.94	16.42	21.38		111	17.55	22.38	27.22	32.06	41.75
57	9.14	11.66	14.19	16.71	21.76		112	17.71	22.59	27.47	32.35	42.13
58	9.3	11.87	14.44	17.00	22.14		113	17.86	22.78	27.71	32.63	42.49
59	9.45	12.07	14.67	17.28	22.50		114	18.01	22.98	27.95	32.92	42.86
60	9.61	12.27	14.91	17.57	22.87		115	18.16	23.17	28.19	33.20	43.22
61	9.76	12.46	15.15	17.84	23.24		116	18.31	23.37	28.43	33.48	43.59
62	9.92	12.65	15.40	18.12	23.61		117	18.47	23.57	28.67	33.77	43.97
63	10.08	12.85	15.64	18.41	23.98		118	18.63	23.78	28.92	34.06	44.35
64	10.24	13.06	15.88	18.71	24.36		119	18.79	23.98	29.16	34.35	44.72
65	10.39	13.25	16.12	18.99	24.72		120	18.95	24.18	29.40	34.63	45.09
66	10.55	13.45	16.36	19.27	25.09							

Single Wall Rectangular Duct - Clutcher Size Calculation Chart - Table B-6												
Spread Horseshoe at 15° Hanging Configuration - 10' Hanger Spacing												
Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot						Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot				
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge			26 gauge	24 gauge	22 gauge	20 gauge	18 gauge
12	2.14	2.73	3.12	3.67	4.77		67	10.70	13.64	16.60	19.55	25.45
13	2.30	2.93	3.35	3.95	5.14		68	10.85	13.84	16.84	19.83	25.82
14	2.45	3.12	3.60	4.24	5.52		69	11.00	14.04	17.08	20.12	26.20
15	2.60	3.32	3.84	4.52	5.89		70	11.16	14.25	17.33	20.41	26.58
16	2.76	3.53	4.08	4.80	6.25		71	11.31	14.44	17.56	20.69	26.95
17	2.91	3.72	4.32	5.09	6.63		72	11.47	14.64	17.80	20.98	27.32
18	3.07	3.92	4.57	5.37	6.99		73	11.62	14.84	18.04	21.26	27.68
19	3.23	4.12	4.80	2.66	7.36		74	11.78	15.04	18.29	21.55	28.05
20	3.38	4.31	5.25	6.19	8.06		75	11.94	15.24	18.54	21.83	28.42
21	3.59	4.52	5.50	6.48	8.43		76	12.10	15.44	18.79	22.12	28.80
22	3.70	4.72	5.74	6.76	8.81		77	12.25	15.63	19.02	22.40	29.16
23	3.86	4.92	5.98	7.05	9.19		78	12.41	15.83	19.26	22.68	29.53
24	4.10	5.11	6.23	7.33	9.54		79	12.56	16.03	19.49	22.96	29.90
25	4.16	5.31	6.47	7.61	9.91		80	12.72	16.23	19.73	23.25	30.27
26	4.31	5.51	6.70	7.90	10.28		81	12.88	16.42	19.98	23.53	30.64
27	4.47	5.72	6.95	8.19	10.66		82	13.04	16.62	20.23	23.82	31.02
28	4.64	5.92	7.19	8.47	11.04		83	13.19	16.82	20.47	24.10	31.38
29	4.79	6.12	7.44	8.76	11.40		84	13.35	17.03	20.71	24.39	31.75
30	4.94	6.31	7.67	9.04	11.77		85	13.50	17.22	20.95	24.67	32.13
31	5.11	6.51	7.91	9.32	12.13		86	13.65	17.42	21.19	24.96	32.49
32	5.25	6.71	8.15	9.60	12.50		87	13.81	17.62	21.43	25.24	32.87
33	5.41	6.90	8.39	9.89	12.88		88	13.97	17.83	21.68	25.53	33.25
34	5.57	7.10	8.64	10.18	13.26		89	14.12	18.02	21.92	25.81	33.61
35	5.72	7.30	8.88	10.46	13.62		90	14.28	18.22	22.16	26.10	33.98
36	5.88	7.50	9.13	10.74	13.98		91	14.43	18.41	22.40	26.38	34.37
37	6.04	7.69	9.36	11.02	14.35		92	14.58	18.61	22.64	26.66	34.71
38	6.19	7.89	9.60	11.31	14.72		93	14.74	18.81	22.88	26.95	35.08
39	6.34	8.11	9.85	11.60	15.10		94	14.90	19.01	23.12	27.24	35.46
40	6.50	8.30	10.09	11.88	15.48		95	15.05	19.21	23.36	27.52	35.82
41	6.65	8.50	10.33	12.16	15.84		96	15.21	19.41	23.61	27.80	36.19
42	6.81	8.69	10.56	12.45	16.21		97	15.36	19.60	23.84	28.08	36.56
43	6.96	8.88	10.80	12.73	16.57		98	15.52	19.80	24.08	28.37	36.93
44	7.12	9.08	11.05	13.02	16.94		99	15.67	20.00	24.33	28.65	37.31
45	7.27	9.28	11.29	13.31	17.32		100	15.83	20.21	24.58	28.94	37.69
46	7.43	9.48	11.54	13.60	17.70		101	15.98	20.40	24.81	29.22	38.05
47	7.59	9.68	11.78	13.87	18.06		102	16.14	20.60	25.05	29.51	38.42
48	7.75	9.88	12.02	14.15	18.42		103	16.29	20.79	25.29	29.79	38.78
49	7.90	10.08	12.25	14.43	18.79		104	16.45	20.99	25.53	30.08	39.15
50	8.05	10.28	12.49	14.72	19.17		105	16.61	21.19	25.78	30.36	39.52
51	8.27	10.48	12.93	15.00	19.54		106	16.77	21.39	26.03	30.65	39.90
52	8.37	10.68	12.98	15.29	19.92		107	16.92	21.58	26.26	30.93	40.26
53	8.52	10.87	13.22	15.57	20.28		108	17.07	21.78	26.50	31.21	40.63
54	8.68	11.07	13.47	15.86	20.65		109	17.23	21.98	26.74	31.49	41.00
55	8.83	11.26	13.70	16.14	21.01		110	17.39	22.18	26.98	31.78	41.38
56	8.98	11.46	13.94	16.42	21.38		111	17.55	22.38	27.22	32.06	41.75
57	9.14	11.66	14.19	16.71	21.76		112	17.71	22.59	27.47	32.35	42.13
58	9.3	11.87	14.44	17.00	22.14		113	17.86	22.78	27.71	32.63	42.49
59	9.45	12.07	14.67	17.28	22.50		114	18.01	22.98	27.95	32.92	42.86
60	9.61	12.27	14.91	17.57	22.87		115	18.16	23.17	28.19	33.20	43.22
61	9.76	12.46	15.15	17.84	23.24		116	18.31	23.37	28.43	33.48	43.59
62	9.92	12.65	15.40	18.12	23.61		117	18.47	23.57	28.67	33.77	43.97
63	10.08	12.85	15.64	18.41	23.98		118	18.63	23.78	28.92	34.06	44.35
64	10.24	13.06	15.88	18.71	24.36		119	18.79	23.98	29.16	34.35	44.72
65	10.39	13.25	16.12	18.99	24.72		120	18.95	24.18	29.40	34.63	45.09
66	10.55	13.45	16.36	19.27	25.09							

Single Wall Rectangular Duct - Clutcher Size Calculation Chart - Table B-7												
Spread Horseshoe at 15° Hanging Configuration - 6' Hanger Spacing												
Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot						Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot				
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge			26 gauge	24 gauge	22 gauge	20 gauge	18 gauge
12	2.14	2.73	3.12	3.67	4.77		67	10.70	13.64	16.60	19.55	25.45
13	2.30	2.93	3.35	3.95	5.14		68	10.85	13.84	16.84	19.83	25.82
14	2.45	3.12	3.60	4.24	5.52		69	11.00	14.04	17.08	20.12	26.20
15	2.60	3.32	3.84	4.52	5.89		70	11.16	14.25	17.33	20.41	26.58
16	2.76	3.53	4.08	4.80	6.25		71	11.31	14.44	17.56	20.69	26.95
17	2.91	3.72	4.32	5.09	6.63		72	11.47	14.64	17.80	20.98	27.32
18	3.07	3.92	4.57	5.37	6.99		73	11.62	14.84	18.04	21.26	27.68
19	3.23	4.12	4.80	2.66	7.36		74	11.78	15.04	18.29	21.55	28.05
20	3.38	4.31	5.25	6.19	8.06		75	11.94	15.24	18.54	21.83	28.42
21	3.59	4.52	5.50	6.48	8.43		76	12.10	15.44	18.79	22.12	28.80
22	3.70	4.72	5.74	6.76	8.81		77	12.25	15.63	19.02	22.40	29.16
23	3.86	4.92	5.98	7.05	9.19		78	12.41	15.83	19.26	22.68	29.53
24	4.10	5.11	6.23	7.33	9.54		79	12.56	16.03	19.49	22.96	29.90
25	4.16	5.31	6.47	7.61	9.91		80	12.72	16.23	19.73	23.25	30.27
26	4.31	5.51	6.70	7.90	10.28		81	12.88	16.42	19.98	23.53	30.64
27	4.47	5.72	6.95	8.19	10.66		82	13.04	16.62	20.23	23.82	31.02
28	4.64	5.92	7.19	8.47	11.04		83	13.19	16.82	20.47	24.10	31.38
29	4.79	6.12	7.44	8.76	11.40		84	13.35	17.03	20.71	24.39	31.75
30	4.94	6.31	7.67	9.04	11.77		85	13.50	17.22	20.95	24.67	32.13
31	5.11	6.51	7.91	9.32	12.13		86	13.65	17.42	21.19	24.96	32.49
32	5.25	6.71	8.15	9.60	12.50		87	13.81	17.62	21.43	25.24	32.87
33	5.41	6.90	8.39	9.89	12.88		88	13.97	17.83	21.68	25.53	33.25
34	5.57	7.10	8.64	10.18	13.26		89	14.12	18.02	21.92	25.81	33.61
35	5.72	7.30	8.88	10.46	13.62		90	14.28	18.22	22.16	26.10	33.98
36	5.88	7.50	9.13	10.74	13.98		91	14.43	18.41	22.40	26.38	34.37
37	6.04	7.69	9.36	11.02	14.35		92	14.58	18.61	22.64	26.66	34.71
38	6.19	7.89	9.60	11.31	14.72		93	14.74	18.81	22.88	26.95	35.08
39	6.34	8.11	9.85	11.60	15.10		94	14.90	19.01	23.12	27.24	35.46
40	6.50	8.30	10.09	11.88	15.48		95	15.05	19.21	23.36	27.52	35.82
41	6.65	8.50	10.33	12.16	15.84		96	15.21	19.41	23.61	27.80	36.19
42	6.81	8.69	10.56	12.45	16.21		97	15.36	19.60	23.84	28.08	36.56
43	6.96	8.88	10.80	12.73	16.57		98	15.52	19.80	24.08	28.37	36.93
44	7.12	9.08	11.05	13.02	16.94		99	15.67	20.00	24.33	28.65	37.31
45	7.27	9.28	11.29	13.31	17.32		100	15.83	20.21	24.58	28.94	37.69
46	7.43	9.48	11.54	13.60	17.70		101	15.98	20.40	24.81	29.22	38.05
47	7.59	9.68	11.78	13.87	18.06		102	16.14	20.60	25.05	29.51	38.42
48	7.75	9.88	12.02	14.15	18.42		103	16.29	20.79	25.29	29.79	38.78
49	7.90	10.08	12.25	14.43	18.79		104	16.45	20.99	25.53	30.08	39.15
50	8.05	10.28	12.49	14.72	19.17		105	16.61	21.19	25.78	30.36	39.52
51	8.27	10.48	12.93	15.00	19.54		106	16.77	21.39	26.03	30.65	39.90
52	8.37	10.68	12.98	15.29	19.92		107	16.92	21.58	26.26	30.93	40.26
53	8.52	10.87	13.22	15.57	20.28		108	17.07	21.78	26.50	31.21	40.63
54	8.68	11.07	13.47	15.86	20.65		109	17.23	21.98	26.74	31.49	41.00
55	8.83	11.26	13.70	16.14	21.01		110	17.39	22.18	26.98	31.78	41.38
56	8.98	11.46	13.94	16.42	21.38		111	17.55	22.38	27.22	32.06	41.75
57	9.14	11.66	14.19	16.71	21.76		112	17.71	22.59	27.47	32.35	42.13
58	9.3	11.87	14.44	17.00	22.14		113	17.86	22.78	27.71	32.63	42.49
59	9.45	12.07	14.67	17.28	22.50		114	18.01	22.98	27.95	32.92	42.86
60	9.61	12.27	14.91	17.57	22.87		115	18.16	23.17	28.19	33.20	43.22
61	9.76	12.46	15.15	17.84	23.24		116	18.31	23.37	28.43	33.48	43.59
62	9.92	12.65	15.40	18.12	23.61		117	18.47	23.57	28.67	33.77	43.97
63	10.08	12.85	15.64	18.41	23.98		118	18.63	23.78	28.92	34.06	44.35
64	10.24	13.06	15.88	18.71	24.36		119	18.79	23.98	29.16	34.35	44.72
65	10.39	13.25	16.12	18.99	24.72		120	18.95	24.18	29.40	34.63	45.09
66	10.55	13.45	16.36	19.27	25.09							

Single Wall Rectangular Duct - Clutcher Size Calculation Chart - Table B-8												
Spread Horseshoe at 15° Hanging Configuration - 5' Hanger Spacing												
Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot						Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot				
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge			26 gauge	24 gauge	22 gauge	20 gauge	18 gauge
12	2.14	2.73	3.12	3.67	4.77		67	10.70	13.64	16.60	19.55	25.45
13	2.30	2.93	3.35	3.95	5.14		68	10.85	13.84	16.84	19.83	25.82
14	2.45	3.12	3.60	4.24	5.52		69	11.00	14.04	17.08	20.12	26.20
15	2.60	3.32	3.84	4.52	5.89		70	11.16	14.25	17.33	20.41	26.58
16	2.76	3.53	4.08	4.80	6.25		71	11.31	14.44	17.56	20.69	26.95
17	2.91	3.72	4.32	5.09	6.63		72	11.47	14.64	17.80	20.98	27.32
18	3.07	3.92	4.57	5.37	6.99		73	11.62	14.84	18.04	21.26	27.68
19	3.23	4.12	4.80	2.66	7.36		74	11.78	15.04	18.29	21.55	28.05
20	3.38	4.31	5.25	6.19	8.06		75	11.94	15.24	18.54	21.83	28.42
21	3.59	4.52	5.50	6.48	8.43		76	12.10	15.44	18.79	22.12	28.80
22	3.70	4.72	5.74	6.76	8.81		77	12.25	15.63	19.02	22.40	29.16
23	3.86	4.92	5.98	7.05	9.19		78	12.41	15.83	19.26	22.68	29.53
24	4.10	5.11	6.23	7.33	9.54		79	12.56	16.03	19.49	22.96	29.90
25	4.16	5.31	6.47	7.61	9.91		80	12.72	16.23	19.73	23.25	30.27
26	4.31	5.51	6.70	7.90	10.28		81	12.88	16.42	19.98	23.53	30.64
27	4.47	5.72	6.95	8.19	10.66		82	13.04	16.62	20.23	23.82	31.02
28	4.64	5.92	7.19	8.47	11.04		83	13.19	16.82	20.47	24.10	31.38
29	4.79	6.12	7.44	8.76	11.40		84	13.35	17.03	20.71	24.39	31.75
30	4.94	6.31	7.67	9.04	11.77		85	13.50	17.22	20.95	24.67	32.13
31	5.11	6.51	7.91	9.32	12.13		86	13.65	17.42	21.19	24.96	32.49
32	5.25	6.71	8.15	9.60	12.50		87	13.81	17.62	21.43	25.24	32.87
33	5.41	6.90	8.39	9.89	12.88		88	13.97	17.83	21.68	25.53	33.25
34	5.57	7.10	8.64	10.18	13.26		89	14.12	18.02	21.92	25.81	33.61
35	5.72	7.30	8.88	10.46	13.62		90	14.28	18.22	22.16	26.10	33.98
36	5.88	7.50	9.13	10.74	13.98		91	14.43	18.41	22.40	26.38	34.37
37	6.04	7.69	9.36	11.02	14.35		92	14.58	18.61	22.64	26.66	34.71
38	6.19	7.89	9.60	11.31	14.72		93	14.74	18.81	22.88	26.95	35.08
39	6.34	8.11	9.85	11.60	15.10		94	14.90	19.01	23.12	27.24	35.46
40	6.50	8.30	10.09	11.88	15.48		95	15.05	19.21	23.36	27.52	35.82
41	6.65	8.50	10.33	12.16	15.84		96	15.21	19.41	23.61	27.80	36.19
42	6.81	8.69	10.56	12.45	16.21		97	15.36	19.60	23.84	28.08	36.56
43	6.96	8.88	10.80	12.73	16.57		98	15.52	19.80	24.08	28.37	36.93
44	7.12	9.08	11.05	13.02	16.94		99	15.67	20.00	24.33	28.65	37.31
45	7.27	9.28	11.29	13.31	17.32		100	15.83	20.21	24.58	28.94	37.69
46	7.43	9.48	11.54	13.60	17.70		101	15.98	20.40	24.81	29.22	38.05
47	7.59	9.68	11.78	13.87	18.06		102	16.14	20.60	25.05	29.51	38.42
48	7.75	9.88	12.02	14.15	18.42		103	16.29	20.79	25.29	29.79	38.78
49	7.90	10.08	12.25	14.43	18.79		104	16.45	20.99	25.53	30.08	39.15
50	8.05	10.28	12.49	14.72	19.17		105	16.61	21.19	25.78	30.36	39.52
51	8.27	10.48	12.93	15.00	19.54		106	16.77	21.39	26.03	30.65	39.90
52	8.37	10.68	12.98	15.29	19.92		107	16.92	21.58	26.26	30.93	40.26
53	8.52	10.87	13.22	15.57	20.28		108	17.07	21.78	26.50	31.21	40.63
54	8.68	11.07	13.47	15.86	20.65		109	17.23	21.98	26.74	31.49	41.00
55	8.83	11.26	13.70	16.14	21.01		110	17.39	22.18	26.98	31.78	41.38
56	8.98	11.46	13.94	16.42	21.38		111	17.55	22.38	27.22	32.06	41.75
57	9.14	11.66	14.19	16.71	21.76		112	17.71	22.59	27.47	32.35	42.13
58	9.3	11.87	14.44	17.00	22.14		113	17.86	22.78	27.71	32.63	42.49
59	9.45	12.07	14.67	17.28	22.50		114	18.01	22.98	27.95	32.92	42.86
60	9.61	12.27	14.91	17.57	22.87		115	18.16	23.17	28.19	33.20	43.22
61	9.76	12.46	15.15	17.84	23.24		116	18.31	23.37	28.43	33.48	43.59
62	9.92	12.65	15.40	18.12	23.61		117	18.47	23.57	28.67	33.77	43.97
63	10.08	12.85	15.64	18.41	23.98		118	18.63	23.78	28.92	34.06	44.35
64	10.24	13.06	15.88	18.71	24.36		119	18.79	23.98	29.16	34.35	44.72
65	10.39	13.25	16.12	18.99	24.72		120	18.95	24.18	29.40	34.63	45.09
66	10.55	13.45	16.36	19.27	25.09							

Single Wall Rectangular Duct - Clutcher Size Calculation Chart - Table B-9

Spread Horseshoe at 30° Hanging Configuration - 12' Hanger Spacing

Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot				
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge
12	2.14	2.73	3.12	3.67	4.77
13	2.30	2.93	3.35	3.95	5.14
14	2.45	3.12	3.60	4.24	5.52
15	2.60	3.32	3.84	4.52	5.89
16	2.76	3.53	4.08	4.80	6.25
17	2.91	3.72	4.32	5.09	6.63
18	3.07	3.92	4.57	5.37	6.99
19	3.23	4.12	4.80	2.66	7.36
20	3.38	4.31	5.25	6.19	8.06
21	3.59	4.52	5.50	6.48	8.43
22	3.70	4.72	5.74	6.76	8.81
23	3.86	4.92	5.98	7.05	9.19
24	4.10	5.11	6.23	7.33	9.54
25	4.16	5.31	6.47	7.61	9.91
26	4.31	5.51	6.70	7.90	10.28
27	4.47	5.72	6.95	8.19	10.66
28	4.64	5.92	7.19	8.47	11.04
29	4.79	6.12	7.44	8.76	11.40
30	4.94	6.31	7.67	9.04	11.77
31	5.11	6.51	7.91	9.32	12.13
32	5.25	6.71	8.15	9.60	12.50
33	5.41	6.90	8.39	9.89	12.88
34	5.57	7.10	8.64	10.18	13.26
35	5.72	7.30	8.88	10.46	13.62
36	5.88	7.50	9.13	10.74	13.98
37	6.04	7.69	9.36	11.02	14.35
38	6.19	7.89	9.60	11.31	14.72
39	6.34	8.11	9.85	11.60	15.10
40	6.50	8.30	10.09	11.88	15.48
41	6.65	8.50	10.33	12.16	15.84
42	6.81	8.69	10.56	12.45	16.21
43	6.96	8.88	10.80	12.73	16.57
44	7.12	9.08	11.05	13.02	16.94
45	7.27	9.28	11.29	13.31	17.32
46	7.43	9.48	11.54	13.60	17.70
47	7.59	9.68	11.78	13.87	18.06
48	7.75	9.88	12.02	14.15	18.42
49	7.90	10.08	12.25	14.43	18.79
50	8.05	10.28	12.49	14.72	19.17
51	8.27	10.48	12.93	15.00	19.54
52	8.37	10.68	12.98	15.29	19.92
53	8.52	10.87	13.22	15.57	20.28
54	8.68	11.07	13.47	15.86	20.65
55	8.83	11.26	13.70	16.14	21.01
56	8.98	11.46	13.94	16.42	21.38
57	9.14	11.66	14.19	16.71	21.76
58	9.3	11.87	14.44	17.00	22.14
59	9.45	12.07	14.67	17.28	22.50
60	9.61	12.27	14.91	17.57	22.87
61	9.76	12.46	15.15	17.84	23.24
62	9.92	12.65	15.40	18.12	23.61
63	10.08	12.85	15.64	18.41	23.98
64	10.24	13.06	15.88	18.71	24.36
65	10.39	13.25	16.12	18.99	24.72
66	10.55	13.45	16.36	19.27	25.09

Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot				
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge
67	10.70	13.64	16.60	19.55	25.45
68	10.85	13.84	16.84	19.83	25.82
69	11.00	14.04	17.08	20.12	26.20
70	11.16	14.25	17.33	20.41	26.58
71	11.31	14.44	17.56	20.69	26.95
72	11.47	14.64	17.80	20.98	27.32
73	11.62	14.84	18.04	21.26	27.68
74	11.78	15.04	18.29	21.55	28.05
75	11.94	15.24	18.54	21.83	28.42
76	12.10	15.44	18.79	22.12	28.80
77	12.25	15.63	19.02	22.40	29.16
78	12.41	15.83	19.26	22.68	29.53
79	12.56	16.03	19.49	22.96	29.90
80	12.72	16.23	19.73	23.25	30.27
81	12.88	16.42	19.98	23.53	30.64
82	13.04	16.62	20.23	23.82	31.02
83	13.19	16.82	20.47	24.10	31.38
84	13.35	17.03	20.71	24.39	31.75
85	13.50	17.22	20.95	24.67	32.13
86	13.65	17.42	21.19	24.96	32.49
87	13.81	17.62	21.43	25.24	32.87
88	13.97	17.83	21.68	25.53	33.25
89	14.12	18.02	21.92	25.81	33.61
90	14.28	18.22	22.16	26.10	33.98
91	14.43	18.41	22.40	26.38	34.37
92	14.58	18.61	22.64	26.66	34.71
93	14.74	18.81	22.88	26.95	35.08
94	14.90	19.01	23.12	27.24	35.46
95	15.05	19.21	23.36	27.52	35.82
96	15.21	19.41	23.61	27.80	36.19
97	15.36	19.60	23.84	28.08	36.56
98	15.52	19.80	24.08	28.37	36.93
99	15.67	20.00	24.33	28.65	37.31
100	15.83	20.21	24.58	28.94	37.69
101	15.98	20.40	24.81	29.22	38.05
102	16.14	20.60	25.05	29.51	38.42
103	16.29	20.79	25.29	29.79	38.78
104	16.45	20.99	25.53	30.08	39.15
105	16.61	21.19	25.78	30.36	39.52
106	16.77	21.39	26.03	30.65	39.90
107	16.92	21.58	26.26	30.93	40.26
108	17.07	21.78	26.50	31.21	40.63
109	17.23	21.98	26.74	31.49	41.00
110	17.39	22.18	26.98	31.78	41.38
111	17.55	22.38	27.22	32.06	41.75
112	17.71	22.59	27.47	32.35	42.13
113	17.86	22.78	27.71	32.63	42.49
114	18.01	22.98	27.95	32.92	42.86
115	18.16	23.17	28.19	33.20	43.22
116	18.31	23.37	28.43	33.48	43.59
117	18.47	23.57	28.67	33.77	43.97
118	18.63	23.78	28.92	34.06	44.35
119	18.79	23.98	29.16	34.35	44.72
120	18.95	24.18	29.40	34.63	45.09

Single Wall Rectangular Duct - Clutcher Size Calculation Chart - Table B-10												
Spread Horseshoe at 30° Hanging Configuration - 10' Hanger Spacing												
Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot						Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot				
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge			26 gauge	24 gauge	22 gauge	20 gauge	18 gauge
12	2.14	2.73	3.12	3.67	4.77		67	10.70	13.64	16.60	19.55	25.45
13	2.30	2.93	3.35	3.95	5.14		68	10.85	13.84	16.84	19.83	25.82
14	2.45	3.12	3.60	4.24	5.52		69	11.00	14.04	17.08	20.12	26.20
15	2.60	3.32	3.84	4.52	5.89		70	11.16	14.25	17.33	20.41	26.58
16	2.76	3.53	4.08	4.80	6.25		71	11.31	14.44	17.56	20.69	26.95
17	2.91	3.72	4.32	5.09	6.63		72	11.47	14.64	17.80	20.98	27.32
18	3.07	3.92	4.57	5.37	6.99		73	11.62	14.84	18.04	21.26	27.68
19	3.23	4.12	4.80	2.66	7.36		74	11.78	15.04	18.29	21.55	28.05
20	3.38	4.31	5.25	6.19	8.06		75	11.94	15.24	18.54	21.83	28.42
21	3.59	4.52	5.50	6.48	8.43		76	12.10	15.44	18.79	22.12	28.80
22	3.70	4.72	5.74	6.76	8.81		77	12.25	15.63	19.02	22.40	29.16
23	3.86	4.92	5.98	7.05	9.19		78	12.41	15.83	19.26	22.68	29.53
24	4.10	5.11	6.23	7.33	9.54		79	12.56	16.03	19.49	22.96	29.90
25	4.16	5.31	6.47	7.61	9.91		80	12.72	16.23	19.73	23.25	30.27
26	4.31	5.51	6.70	7.90	10.28		81	12.88	16.42	19.98	23.53	30.64
27	4.47	5.72	6.95	8.19	10.66		82	13.04	16.62	20.23	23.82	31.02
28	4.64	5.92	7.19	8.47	11.04		83	13.19	16.82	20.47	24.10	31.38
29	4.79	6.12	7.44	8.76	11.40		84	13.35	17.03	20.71	24.39	31.75
30	4.94	6.31	7.67	9.04	11.77		85	13.50	17.22	20.95	24.67	32.13
31	5.11	6.51	7.91	9.32	12.13		86	13.65	17.42	21.19	24.96	32.49
32	5.25	6.71	8.15	9.60	12.50		87	13.81	17.62	21.43	25.24	32.87
33	5.41	6.90	8.39	9.89	12.88		88	13.97	17.83	21.68	25.53	33.25
34	5.57	7.10	8.64	10.18	13.26		89	14.12	18.02	21.92	25.81	33.61
35	5.72	7.30	8.88	10.46	13.62		90	14.28	18.22	22.16	26.10	33.98
36	5.88	7.50	9.13	10.74	13.98		91	14.43	18.41	22.40	26.38	34.37
37	6.04	7.69	9.36	11.02	14.35		92	14.58	18.61	22.64	26.66	34.71
38	6.19	7.89	9.60	11.31	14.72		93	14.74	18.81	22.88	26.95	35.08
39	6.34	8.11	9.85	11.60	15.10		94	14.90	19.01	23.12	27.24	35.46
40	6.50	8.30	10.09	11.88	15.48		95	15.05	19.21	23.36	27.52	35.82
41	6.65	8.50	10.33	12.16	15.84		96	15.21	19.41	23.61	27.80	36.19
42	6.81	8.69	10.56	12.45	16.21		97	15.36	19.60	23.84	28.08	36.56
43	6.96	8.88	10.80	12.73	16.57		98	15.52	19.80	24.08	28.37	36.93
44	7.12	9.08	11.05	13.02	16.94		99	15.67	20.00	24.33	28.65	37.31
45	7.27	9.28	11.29	13.31	17.32		100	15.83	20.21	24.58	28.94	37.69
46	7.43	9.48	11.54	13.60	17.70		101	15.98	20.40	24.81	29.22	38.05
47	7.59	9.68	11.78	13.87	18.06		102	16.14	20.60	25.05	29.51	38.42
48	7.75	9.88	12.02	14.15	18.42		103	16.29	20.79	25.29	29.79	38.78
49	7.90	10.08	12.25	14.43	18.79		104	16.45	20.99	25.53	30.08	39.15
50	8.05	10.28	12.49	14.72	19.17		105	16.61	21.19	25.78	30.36	39.52
51	8.27	10.48	12.93	15.00	19.54		106	16.77	21.39	26.03	30.65	39.90
52	8.37	10.68	12.98	15.29	19.92		107	16.92	21.58	26.26	30.93	40.26
53	8.52	10.87	13.22	15.57	20.28		108	17.07	21.78	26.50	31.21	40.63
54	8.68	11.07	13.47	15.86	20.65		109	17.23	21.98	26.74	31.49	41.00
55	8.83	11.26	13.70	16.14	21.01		110	17.39	22.18	26.98	31.78	41.38
56	8.98	11.46	13.94	16.42	21.38		111	17.55	22.38	27.22	32.06	41.75
57	9.14	11.66	14.19	16.71	21.76		112	17.71	22.59	27.47	32.35	42.13
58	9.3	11.87	14.44	17.00	22.14		113	17.86	22.78	27.71	32.63	42.49
59	9.45	12.07	14.67	17.28	22.50		114	18.01	22.98	27.95	32.92	42.86
60	9.61	12.27	14.91	17.57	22.87		115	18.16	23.17	28.19	33.20	43.22
61	9.76	12.46	15.15	17.84	23.24		116	18.31	23.37	28.43	33.48	43.59
62	9.92	12.65	15.40	18.12	23.61		117	18.47	23.57	28.67	33.77	43.97
63	10.08	12.85	15.64	18.41	23.98		118	18.63	23.78	28.92	34.06	44.35
64	10.24	13.06	15.88	18.71	24.36		119	18.79	23.98	29.16	34.35	44.72
65	10.39	13.25	16.12	18.99	24.72		120	18.95	24.18	29.40	34.63	45.09
66	10.55	13.45	16.36	19.27	25.09							

Single Wall Rectangular Duct - Clutcher Size Calculation Chart - Table B-11												
Spread Horseshoe at 30° Hanging Configuration - 6' Hanger Spacing												
Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot						Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot				
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge			26 gauge	24 gauge	22 gauge	20 gauge	18 gauge
12	2.14	2.73	3.12	3.67	4.77		67	10.70	13.64	16.60	19.55	25.45
13	2.30	2.93	3.35	3.95	5.14		68	10.85	13.84	16.84	19.83	25.82
14	2.45	3.12	3.60	4.24	5.52		69	11.00	14.04	17.08	20.12	26.20
15	2.60	3.32	3.84	4.52	5.89		70	11.16	14.25	17.33	20.41	26.58
16	2.76	3.53	4.08	4.80	6.25		71	11.31	14.44	17.56	20.69	26.95
17	2.91	3.72	4.32	5.09	6.63		72	11.47	14.64	17.80	20.98	27.32
18	3.07	3.92	4.57	5.37	6.99		73	11.62	14.84	18.04	21.26	27.68
19	3.23	4.12	4.80	2.66	7.36		74	11.78	15.04	18.29	21.55	28.05
20	3.38	4.31	5.25	6.19	8.06		75	11.94	15.24	18.54	21.83	28.42
21	3.59	4.52	5.50	6.48	8.43		76	12.10	15.44	18.79	22.12	28.80
22	3.70	4.72	5.74	6.76	8.81		77	12.25	15.63	19.02	22.40	29.16
23	3.86	4.92	5.98	7.05	9.19		78	12.41	15.83	19.26	22.68	29.53
24	4.10	5.11	6.23	7.33	9.54		79	12.56	16.03	19.49	22.96	29.90
25	4.16	5.31	6.47	7.61	9.91		80	12.72	16.23	19.73	23.25	30.27
26	4.31	5.51	6.70	7.90	10.28		81	12.88	16.42	19.98	23.53	30.64
27	4.47	5.72	6.95	8.19	10.66		82	13.04	16.62	20.23	23.82	31.02
28	4.64	5.92	7.19	8.47	11.04		83	13.19	16.82	20.47	24.10	31.38
29	4.79	6.12	7.44	8.76	11.40		84	13.35	17.03	20.71	24.39	31.75
30	4.94	6.31	7.67	9.04	11.77		85	13.50	17.22	20.95	24.67	32.13
31	5.11	6.51	7.91	9.32	12.13		86	13.65	17.42	21.19	24.96	32.49
32	5.25	6.71	8.15	9.60	12.50		87	13.81	17.62	21.43	25.24	32.87
33	5.41	6.90	8.39	9.89	12.88		88	13.97	17.83	21.68	25.53	33.25
34	5.57	7.10	8.64	10.18	13.26		89	14.12	18.02	21.92	25.81	33.61
35	5.72	7.30	8.88	10.46	13.62		90	14.28	18.22	22.16	26.10	33.98
36	5.88	7.50	9.13	10.74	13.98		91	14.43	18.41	22.40	26.38	34.37
37	6.04	7.69	9.36	11.02	14.35		92	14.58	18.61	22.64	26.66	34.71
38	6.19	7.89	9.60	11.31	14.72		93	14.74	18.81	22.88	26.95	35.08
39	6.34	8.11	9.85	11.60	15.10		94	14.90	19.01	23.12	27.24	35.46
40	6.50	8.30	10.09	11.88	15.48		95	15.05	19.21	23.36	27.52	35.82
41	6.65	8.50	10.33	12.16	15.84		96	15.21	19.41	23.61	27.80	36.19
42	6.81	8.69	10.56	12.45	16.21		97	15.36	19.60	23.84	28.08	36.56
43	6.96	8.88	10.80	12.73	16.57		98	15.52	19.80	24.08	28.37	36.93
44	7.12	9.08	11.05	13.02	16.94		99	15.67	20.00	24.33	28.65	37.31
45	7.27	9.28	11.29	13.31	17.32		100	15.83	20.21	24.58	28.94	37.69
46	7.43	9.48	11.54	13.60	17.70		101	15.98	20.40	24.81	29.22	38.05
47	7.59	9.68	11.78	13.87	18.06		102	16.14	20.60	25.05	29.51	38.42
48	7.75	9.88	12.02	14.15	18.42		103	16.29	20.79	25.29	29.79	38.78
49	7.90	10.08	12.25	14.43	18.79		104	16.45	20.99	25.53	30.08	39.15
50	8.05	10.28	12.49	14.72	19.17		105	16.61	21.19	25.78	30.36	39.52
51	8.27	10.48	12.93	15.00	19.54		106	16.77	21.39	26.03	30.65	39.90
52	8.37	10.68	12.98	15.29	19.92		107	16.92	21.58	26.26	30.93	40.26
53	8.52	10.87	13.22	15.57	20.28		108	17.07	21.78	26.50	31.21	40.63
54	8.68	11.07	13.47	15.86	20.65		109	17.23	21.98	26.74	31.49	41.00
55	8.83	11.26	13.70	16.14	21.01		110	17.39	22.18	26.98	31.78	41.38
56	8.98	11.46	13.94	16.42	21.38		111	17.55	22.38	27.22	32.06	41.75
57	9.14	11.66	14.19	16.71	21.76		112	17.71	22.59	27.47	32.35	42.13
58	9.3	11.87	14.44	17.00	22.14		113	17.86	22.78	27.71	32.63	42.49
59	9.45	12.07	14.67	17.28	22.50		114	18.01	22.98	27.95	32.92	42.86
60	9.61	12.27	14.91	17.57	22.87		115	18.16	23.17	28.19	33.20	43.22
61	9.76	12.46	15.15	17.84	23.24		116	18.31	23.37	28.43	33.48	43.59
62	9.92	12.65	15.40	18.12	23.61		117	18.47	23.57	28.67	33.77	43.97
63	10.08	12.85	15.64	18.41	23.98		118	18.63	23.78	28.92	34.06	44.35
64	10.24	13.06	15.88	18.71	24.36		119	18.79	23.98	29.16	34.35	44.72
65	10.39	13.25	16.12	18.99	24.72		120	18.95	24.18	29.40	34.63	45.09
66	10.55	13.45	16.36	19.27	25.09							

Single Wall Rectangular Duct - Clutcher Size Calculation Chart - Table B-12												
Spread Horseshoe at 30° Hanging Configuration - 5' Hanger Spacing												
Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot						Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot				
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge			26 gauge	24 gauge	22 gauge	20 gauge	18 gauge
12	2.14	2.73	3.12	3.67	4.77		67	10.70	13.64	16.60	19.55	25.45
13	2.30	2.93	3.35	3.95	5.14		68	10.85	13.84	16.84	19.83	25.82
14	2.45	3.12	3.60	4.24	5.52		69	11.00	14.04	17.08	20.12	26.20
15	2.60	3.32	3.84	4.52	5.89		70	11.16	14.25	17.33	20.41	26.58
16	2.76	3.53	4.08	4.80	6.25		71	11.31	14.44	17.56	20.69	26.95
17	2.91	3.72	4.32	5.09	6.63		72	11.47	14.64	17.80	20.98	27.32
18	3.07	3.92	4.57	5.37	6.99		73	11.62	14.84	18.04	21.26	27.68
19	3.23	4.12	4.80	2.66	7.36		74	11.78	15.04	18.29	21.55	28.05
20	3.38	4.31	5.25	6.19	8.06		75	11.94	15.24	18.54	21.83	28.42
21	3.59	4.52	5.50	6.48	8.43		76	12.10	15.44	18.79	22.12	28.80
22	3.70	4.72	5.74	6.76	8.81		77	12.25	15.63	19.02	22.40	29.16
23	3.86	4.92	5.98	7.05	9.19		78	12.41	15.83	19.26	22.68	29.53
24	4.10	5.11	6.23	7.33	9.54		79	12.56	16.03	19.49	22.96	29.90
25	4.16	5.31	6.47	7.61	9.91		80	12.72	16.23	19.73	23.25	30.27
26	4.31	5.51	6.70	7.90	10.28		81	12.88	16.42	19.98	23.53	30.64
27	4.47	5.72	6.95	8.19	10.66		82	13.04	16.62	20.23	23.82	31.02
28	4.64	5.92	7.19	8.47	11.04		83	13.19	16.82	20.47	24.10	31.38
29	4.79	6.12	7.44	8.76	11.40		84	13.35	17.03	20.71	24.39	31.75
30	4.94	6.31	7.67	9.04	11.77		85	13.50	17.22	20.95	24.67	32.13
31	5.11	6.51	7.91	9.32	12.13		86	13.65	17.42	21.19	24.96	32.49
32	5.25	6.71	8.15	9.60	12.50		87	13.81	17.62	21.43	25.24	32.87
33	5.41	6.90	8.39	9.89	12.88		88	13.97	17.83	21.68	25.53	33.25
34	5.57	7.10	8.64	10.18	13.26		89	14.12	18.02	21.92	25.81	33.61
35	5.72	7.30	8.88	10.46	13.62		90	14.28	18.22	22.16	26.10	33.98
36	5.88	7.50	9.13	10.74	13.98		91	14.43	18.41	22.40	26.38	34.37
37	6.04	7.69	9.36	11.02	14.35		92	14.58	18.61	22.64	26.66	34.71
38	6.19	7.89	9.60	11.31	14.72		93	14.74	18.81	22.88	26.95	35.08
39	6.34	8.11	9.85	11.60	15.10		94	14.90	19.01	23.12	27.24	35.46
40	6.50	8.30	10.09	11.88	15.48		95	15.05	19.21	23.36	27.52	35.82
41	6.65	8.50	10.33	12.16	15.84		96	15.21	19.41	23.61	27.80	36.19
42	6.81	8.69	10.56	12.45	16.21		97	15.36	19.60	23.84	28.08	36.56
43	6.96	8.88	10.80	12.73	16.57		98	15.52	19.80	24.08	28.37	36.93
44	7.12	9.08	11.05	13.02	16.94		99	15.67	20.00	24.33	28.65	37.31
45	7.27	9.28	11.29	13.31	17.32		100	15.83	20.21	24.58	28.94	37.69
46	7.43	9.48	11.54	13.60	17.70		101	15.98	20.40	24.81	29.22	38.05
47	7.59	9.68	11.78	13.87	18.06		102	16.14	20.60	25.05	29.51	38.42
48	7.75	9.88	12.02	14.15	18.42		103	16.29	20.79	25.29	29.79	38.78
49	7.90	10.08	12.25	14.43	18.79		104	16.45	20.99	25.53	30.08	39.15
50	8.05	10.28	12.49	14.72	19.17		105	16.61	21.19	25.78	30.36	39.52
51	8.27	10.48	12.93	15.00	19.54		106	16.77	21.39	26.03	30.65	39.90
52	8.37	10.68	12.98	15.29	19.92		107	16.92	21.58	26.26	30.93	40.26
53	8.52	10.87	13.22	15.57	20.28		108	17.07	21.78	26.50	31.21	40.63
54	8.68	11.07	13.47	15.86	20.65		109	17.23	21.98	26.74	31.49	41.00
55	8.83	11.26	13.70	16.14	21.01		110	17.39	22.18	26.98	31.78	41.38
56	8.98	11.46	13.94	16.42	21.38		111	17.55	22.38	27.22	32.06	41.75
57	9.14	11.66	14.19	16.71	21.76		112	17.71	22.59	27.47	32.35	42.13
58	9.3	11.87	14.44	17.00	22.14		113	17.86	22.78	27.71	32.63	42.49
59	9.45	12.07	14.67	17.28	22.50		114	18.01	22.98	27.95	32.92	42.86
60	9.61	12.27	14.91	17.57	22.87		115	18.16	23.17	28.19	33.20	43.22
61	9.76	12.46	15.15	17.84	23.24		116	18.31	23.37	28.43	33.48	43.59
62	9.92	12.65	15.40	18.12	23.61		117	18.47	23.57	28.67	33.77	43.97
63	10.08	12.85	15.64	18.41	23.98		118	18.63	23.78	28.92	34.06	44.35
64	10.24	13.06	15.88	18.71	24.36		119	18.79	23.98	29.16	34.35	44.72
65	10.39	13.25	16.12	18.99	24.72		120	18.95	24.18	29.40	34.63	45.09
66	10.55	13.45	16.36	19.27	25.09							

Single Wall Rectangular Duct - Clutcher Size Calculation Chart - Table B-13												
Spread Horseshoe at 45° Hanging Configuration - 12' Hanger Spacing												
Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot						Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot				
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge			26 gauge	24 gauge	22 gauge	20 gauge	18 gauge
12	2.14	2.73	3.12	3.67	4.77		67	10.70	13.64	16.60	19.55	25.45
13	2.30	2.93	3.35	3.95	5.14		68	10.85	13.84	16.84	19.83	25.82
14	2.45	3.12	3.60	4.24	5.52		69	11.00	14.04	17.08	20.12	26.20
15	2.60	3.32	3.84	4.52	5.89		70	11.16	14.25	17.33	20.41	26.58
16	2.76	3.53	4.08	4.80	6.25		71	11.31	14.44	17.56	20.69	26.95
17	2.91	3.72	4.32	5.09	6.63		72	11.47	14.64	17.80	20.98	27.32
18	3.07	3.92	4.57	5.37	6.99		73	11.62	14.84	18.04	21.26	27.68
19	3.23	4.12	4.80	2.66	7.36		74	11.78	15.04	18.29	21.55	28.05
20	3.38	4.31	5.25	6.19	8.06		75	11.94	15.24	18.54	21.83	28.42
21	3.59	4.52	5.50	6.48	8.43		76	12.10	15.44	18.79	22.12	28.80
22	3.70	4.72	5.74	6.76	8.81		77	12.25	15.63	19.02	22.40	29.16
23	3.86	4.92	5.98	7.05	9.19		78	12.41	15.83	19.26	22.68	29.53
24	4.10	5.11	6.23	7.33	9.54		79	12.56	16.03	19.49	22.96	29.90
25	4.16	5.31	6.47	7.61	9.91		80	12.72	16.23	19.73	23.25	30.27
26	4.31	5.51	6.70	7.90	10.28		81	12.88	16.42	19.98	23.53	30.64
27	4.47	5.72	6.95	8.19	10.66		82	13.04	16.62	20.23	23.82	31.02
28	4.64	5.92	7.19	8.47	11.04		83	13.19	16.82	20.47	24.10	31.38
29	4.79	6.12	7.44	8.76	11.40		84	13.35	17.03	20.71	24.39	31.75
30	4.94	6.31	7.67	9.04	11.77		85	13.50	17.22	20.95	24.67	32.13
31	5.11	6.51	7.91	9.32	12.13		86	13.65	17.42	21.19	24.96	32.49
32	5.25	6.71	8.15	9.60	12.50		87	13.81	17.62	21.43	25.24	32.87
33	5.41	6.90	8.39	9.89	12.88		88	13.97	17.83	21.68	25.53	33.25
34	5.57	7.10	8.64	10.18	13.26		89	14.12	18.02	21.92	25.81	33.61
35	5.72	7.30	8.88	10.46	13.62		90	14.28	18.22	22.16	26.10	33.98
36	5.88	7.50	9.13	10.74	13.98		91	14.43	18.41	22.40	26.38	34.37
37	6.04	7.69	9.36	11.02	14.35		92	14.58	18.61	22.64	26.66	34.71
38	6.19	7.89	9.60	11.31	14.72		93	14.74	18.81	22.88	26.95	35.08
39	6.34	8.11	9.85	11.60	15.10		94	14.90	19.01	23.12	27.24	35.46
40	6.50	8.30	10.09	11.88	15.48		95	15.05	19.21	23.36	27.52	35.82
41	6.65	8.50	10.33	12.16	15.84		96	15.21	19.41	23.61	27.80	36.19
42	6.81	8.69	10.56	12.45	16.21		97	15.36	19.60	23.84	28.08	36.56
43	6.96	8.88	10.80	12.73	16.57		98	15.52	19.80	24.08	28.37	36.93
44	7.12	9.08	11.05	13.02	16.94		99	15.67	20.00	24.33	28.65	37.31
45	7.27	9.28	11.29	13.31	17.32		100	15.83	20.21	24.58	28.94	37.69
46	7.43	9.48	11.54	13.60	17.70		101	15.98	20.40	24.81	29.22	38.05
47	7.59	9.68	11.78	13.87	18.06		102	16.14	20.60	25.05	29.51	38.42
48	7.75	9.88	12.02	14.15	18.42		103	16.29	20.79	25.29	29.79	38.78
49	7.90	10.08	12.25	14.43	18.79		104	16.45	20.99	25.53	30.08	39.15
50	8.05	10.28	12.49	14.72	19.17		105	16.61	21.19	25.78	30.36	39.52
51	8.27	10.48	12.93	15.00	19.54		106	16.77	21.39	26.03	30.65	39.90
52	8.37	10.68	12.98	15.29	19.92		107	16.92	21.58	26.26	30.93	40.26
53	8.52	10.87	13.22	15.57	20.28		108	17.07	21.78	26.50	31.21	40.63
54	8.68	11.07	13.47	15.86	20.65		109	17.23	21.98	26.74	31.49	41.00
55	8.83	11.26	13.70	16.14	21.01		110	17.39	22.18	26.98	31.78	41.38
56	8.98	11.46	13.94	16.42	21.38		111	17.55	22.38	27.22	32.06	41.75
57	9.14	11.66	14.19	16.71	21.76		112	17.71	22.59	27.47	32.35	42.13
58	9.3	11.87	14.44	17.00	22.14		113	17.86	22.78	27.71	32.63	42.49
59	9.45	12.07	14.67	17.28	22.50		114	18.01	22.98	27.95	32.92	42.86
60	9.61	12.27	14.91	17.57	22.87		115	18.16	23.17	28.19	33.20	43.22
61	9.76	12.46	15.15	17.84	23.24		116	18.31	23.37	28.43	33.48	43.59
62	9.92	12.65	15.40	18.12	23.61		117	18.47	23.57	28.67	33.77	43.97
63	10.08	12.85	15.64	18.41	23.98		118	18.63	23.78	28.92	34.06	44.35
64	10.24	13.06	15.88	18.71	24.36		119	18.79	23.98	29.16	34.35	44.72
65	10.39	13.25	16.12	18.99	24.72		120	18.95	24.18	29.40	34.63	45.09
66	10.55	13.45	16.36	19.27	25.09							

Single Wall Rectangular Duct - Clutcher Size Calculation Chart - Table B-14												
Spread Horseshoe at 45° Hanging Configuration - 10' Hanger Spacing												
Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot						Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot				
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge			26 gauge	24 gauge	22 gauge	20 gauge	18 gauge
12	2.14	2.73	3.12	3.67	4.77		67	10.70	13.64	16.60	19.55	25.45
13	2.30	2.93	3.35	3.95	5.14		68	10.85	13.84	16.84	19.83	25.82
14	2.45	3.12	3.60	4.24	5.52		69	11.00	14.04	17.08	20.12	26.20
15	2.60	3.32	3.84	4.52	5.89		70	11.16	14.25	17.33	20.41	26.58
16	2.76	3.53	4.08	4.80	6.25		71	11.31	14.44	17.56	20.69	26.95
17	2.91	3.72	4.32	5.09	6.63		72	11.47	14.64	17.80	20.98	27.32
18	3.07	3.92	4.57	5.37	6.99		73	11.62	14.84	18.04	21.26	27.68
19	3.23	4.12	4.80	2.66	7.36		74	11.78	15.04	18.29	21.55	28.05
20	3.38	4.31	5.25	6.19	8.06		75	11.94	15.24	18.54	21.83	28.42
21	3.59	4.52	5.50	6.48	8.43		76	12.10	15.44	18.79	22.12	28.80
22	3.70	4.72	5.74	6.76	8.81		77	12.25	15.63	19.02	22.40	29.16
23	3.86	4.92	5.98	7.05	9.19		78	12.41	15.83	19.26	22.68	29.53
24	4.10	5.11	6.23	7.33	9.54		79	12.56	16.03	19.49	22.96	29.90
25	4.16	5.31	6.47	7.61	9.91		80	12.72	16.23	19.73	23.25	30.27
26	4.31	5.51	6.70	7.90	10.28		81	12.88	16.42	19.98	23.53	30.64
27	4.47	5.72	6.95	8.19	10.66		82	13.04	16.62	20.23	23.82	31.02
28	4.64	5.92	7.19	8.47	11.04		83	13.19	16.82	20.47	24.10	31.38
29	4.79	6.12	7.44	8.76	11.40		84	13.35	17.03	20.71	24.39	31.75
30	4.94	6.31	7.67	9.04	11.77		85	13.50	17.22	20.95	24.67	32.13
31	5.11	6.51	7.91	9.32	12.13		86	13.65	17.42	21.19	24.96	32.49
32	5.25	6.71	8.15	9.60	12.50		87	13.81	17.62	21.43	25.24	32.87
33	5.41	6.90	8.39	9.89	12.88		88	13.97	17.83	21.68	25.53	33.25
34	5.57	7.10	8.64	10.18	13.26		89	14.12	18.02	21.92	25.81	33.61
35	5.72	7.30	8.88	10.46	13.62		90	14.28	18.22	22.16	26.10	33.98
36	5.88	7.50	9.13	10.74	13.98		91	14.43	18.41	22.40	26.38	34.37
37	6.04	7.69	9.36	11.02	14.35		92	14.58	18.61	22.64	26.66	34.71
38	6.19	7.89	9.60	11.31	14.72		93	14.74	18.81	22.88	26.95	35.08
39	6.34	8.11	9.85	11.60	15.10		94	14.90	19.01	23.12	27.24	35.46
40	6.50	8.30	10.09	11.88	15.48		95	15.05	19.21	23.36	27.52	35.82
41	6.65	8.50	10.33	12.16	15.84		96	15.21	19.41	23.61	27.80	36.19
42	6.81	8.69	10.56	12.45	16.21		97	15.36	19.60	23.84	28.08	36.56
43	6.96	8.88	10.80	12.73	16.57		98	15.52	19.80	24.08	28.37	36.93
44	7.12	9.08	11.05	13.02	16.94		99	15.67	20.00	24.33	28.65	37.31
45	7.27	9.28	11.29	13.31	17.32		100	15.83	20.21	24.58	28.94	37.69
46	7.43	9.48	11.54	13.60	17.70		101	15.98	20.40	24.81	29.22	38.05
47	7.59	9.68	11.78	13.87	18.06		102	16.14	20.60	25.05	29.51	38.42
48	7.75	9.88	12.02	14.15	18.42		103	16.29	20.79	25.29	29.79	38.78
49	7.90	10.08	12.25	14.43	18.79		104	16.45	20.99	25.53	30.08	39.15
50	8.05	10.28	12.49	14.72	19.17		105	16.61	21.19	25.78	30.36	39.52
51	8.27	10.48	12.93	15.00	19.54		106	16.77	21.39	26.03	30.65	39.90
52	8.37	10.68	12.98	15.29	19.92		107	16.92	21.58	26.26	30.93	40.26
53	8.52	10.87	13.22	15.57	20.28		108	17.07	21.78	26.50	31.21	40.63
54	8.68	11.07	13.47	15.86	20.65		109	17.23	21.98	26.74	31.49	41.00
55	8.83	11.26	13.70	16.14	21.01		110	17.39	22.18	26.98	31.78	41.38
56	8.98	11.46	13.94	16.42	21.38		111	17.55	22.38	27.22	32.06	41.75
57	9.14	11.66	14.19	16.71	21.76		112	17.71	22.59	27.47	32.35	42.13
58	9.3	11.87	14.44	17.00	22.14		113	17.86	22.78	27.71	32.63	42.49
59	9.45	12.07	14.67	17.28	22.50		114	18.01	22.98	27.95	32.92	42.86
60	9.61	12.27	14.91	17.57	22.87		115	18.16	23.17	28.19	33.20	43.22
61	9.76	12.46	15.15	17.84	23.24		116	18.31	23.37	28.43	33.48	43.59
62	9.92	12.65	15.40	18.12	23.61		117	18.47	23.57	28.67	33.77	43.97
63	10.08	12.85	15.64	18.41	23.98		118	18.63	23.78	28.92	34.06	44.35
64	10.24	13.06	15.88	18.71	24.36		119	18.79	23.98	29.16	34.35	44.72
65	10.39	13.25	16.12	18.99	24.72		120	18.95	24.18	29.40	34.63	45.09
66	10.55	13.45	16.36	19.27	25.09							

Single Wall Rectangular Duct - Clutcher Size Calculation Chart - Table B-15												
Spread Horseshoe at 45° Hanging Configuration - 6' Hanger Spacing												
Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot						Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot				
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge			26 gauge	24 gauge	22 gauge	20 gauge	18 gauge
12	2.14	2.73	3.12	3.67	4.77		67	10.70	13.64	16.60	19.55	25.45
13	2.30	2.93	3.35	3.95	5.14		68	10.85	13.84	16.84	19.83	25.82
14	2.45	3.12	3.60	4.24	5.52		69	11.00	14.04	17.08	20.12	26.20
15	2.60	3.32	3.84	4.52	5.89		70	11.16	14.25	17.33	20.41	26.58
16	2.76	3.53	4.08	4.80	6.25		71	11.31	14.44	17.56	20.69	26.95
17	2.91	3.72	4.32	5.09	6.63		72	11.47	14.64	17.80	20.98	27.32
18	3.07	3.92	4.57	5.37	6.99		73	11.62	14.84	18.04	21.26	27.68
19	3.23	4.12	4.80	2.66	7.36		74	11.78	15.04	18.29	21.55	28.05
20	3.38	4.31	5.25	6.19	8.06		75	11.94	15.24	18.54	21.83	28.42
21	3.59	4.52	5.50	6.48	8.43		76	12.10	15.44	18.79	22.12	28.80
22	3.70	4.72	5.74	6.76	8.81		77	12.25	15.63	19.02	22.40	29.16
23	3.86	4.92	5.98	7.05	9.19		78	12.41	15.83	19.26	22.68	29.53
24	4.10	5.11	6.23	7.33	9.54		79	12.56	16.03	19.49	22.96	29.90
25	4.16	5.31	6.47	7.61	9.91		80	12.72	16.23	19.73	23.25	30.27
26	4.31	5.51	6.70	7.90	10.28		81	12.88	16.42	19.98	23.53	30.64
27	4.47	5.72	6.95	8.19	10.66		82	13.04	16.62	20.23	23.82	31.02
28	4.64	5.92	7.19	8.47	11.04		83	13.19	16.82	20.47	24.10	31.38
29	4.79	6.12	7.44	8.76	11.40		84	13.35	17.03	20.71	24.39	31.75
30	4.94	6.31	7.67	9.04	11.77		85	13.50	17.22	20.95	24.67	32.13
31	5.11	6.51	7.91	9.32	12.13		86	13.65	17.42	21.19	24.96	32.49
32	5.25	6.71	8.15	9.60	12.50		87	13.81	17.62	21.43	25.24	32.87
33	5.41	6.90	8.39	9.89	12.88		88	13.97	17.83	21.68	25.53	33.25
34	5.57	7.10	8.64	10.18	13.26		89	14.12	18.02	21.92	25.81	33.61
35	5.72	7.30	8.88	10.46	13.62		90	14.28	18.22	22.16	26.10	33.98
36	5.88	7.50	9.13	10.74	13.98		91	14.43	18.41	22.40	26.38	34.37
37	6.04	7.69	9.36	11.02	14.35		92	14.58	18.61	22.64	26.66	34.71
38	6.19	7.89	9.60	11.31	14.72		93	14.74	18.81	22.88	26.95	35.08
39	6.34	8.11	9.85	11.60	15.10		94	14.90	19.01	23.12	27.24	35.46
40	6.50	8.30	10.09	11.88	15.48		95	15.05	19.21	23.36	27.52	35.82
41	6.65	8.50	10.33	12.16	15.84		96	15.21	19.41	23.61	27.80	36.19
42	6.81	8.69	10.56	12.45	16.21		97	15.36	19.60	23.84	28.08	36.56
43	6.96	8.88	10.80	12.73	16.57		98	15.52	19.80	24.08	28.37	36.93
44	7.12	9.08	11.05	13.02	16.94		99	15.67	20.00	24.33	28.65	37.31
45	7.27	9.28	11.29	13.31	17.32		100	15.83	20.21	24.58	28.94	37.69
46	7.43	9.48	11.54	13.60	17.70		101	15.98	20.40	24.81	29.22	38.05
47	7.59	9.68	11.78	13.87	18.06		102	16.14	20.60	25.05	29.51	38.42
48	7.75	9.88	12.02	14.15	18.42		103	16.29	20.79	25.29	29.79	38.78
49	7.90	10.08	12.25	14.43	18.79		104	16.45	20.99	25.53	30.08	39.15
50	8.05	10.28	12.49	14.72	19.17		105	16.61	21.19	25.78	30.36	39.52
51	8.27	10.48	12.93	15.00	19.54		106	16.77	21.39	26.03	30.65	39.90
52	8.37	10.68	12.98	15.29	19.92		107	16.92	21.58	26.26	30.93	40.26
53	8.52	10.87	13.22	15.57	20.28		108	17.07	21.78	26.50	31.21	40.63
54	8.68	11.07	13.47	15.86	20.65		109	17.23	21.98	26.74	31.49	41.00
55	8.83	11.26	13.70	16.14	21.01		110	17.39	22.18	26.98	31.78	41.38
56	8.98	11.46	13.94	16.42	21.38		111	17.55	22.38	27.22	32.06	41.75
57	9.14	11.66	14.19	16.71	21.76		112	17.71	22.59	27.47	32.35	42.13
58	9.3	11.87	14.44	17.00	22.14		113	17.86	22.78	27.71	32.63	42.49
59	9.45	12.07	14.67	17.28	22.50		114	18.01	22.98	27.95	32.92	42.86
60	9.61	12.27	14.91	17.57	22.87		115	18.16	23.17	28.19	33.20	43.22
61	9.76	12.46	15.15	17.84	23.24		116	18.31	23.37	28.43	33.48	43.59
62	9.92	12.65	15.40	18.12	23.61		117	18.47	23.57	28.67	33.77	43.97
63	10.08	12.85	15.64	18.41	23.98		118	18.63	23.78	28.92	34.06	44.35
64	10.24	13.06	15.88	18.71	24.36		119	18.79	23.98	29.16	34.35	44.72
65	10.39	13.25	16.12	18.99	24.72		120	18.95	24.18	29.40	34.63	45.09
66	10.55	13.45	16.36	19.27	25.09							

Single Wall Rectangular Duct - Clutcher Size Calculation Chart - Table B-16												
Spread Horseshoe at 45° Hanging Configuration - 5' Hanger Spacing												
Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot						Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot				
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge			26 gauge	24 gauge	22 gauge	20 gauge	18 gauge
12	2.14	2.73	3.12	3.67	4.77		67	10.70	13.64	16.60	19.55	25.45
13	2.30	2.93	3.35	3.95	5.14		68	10.85	13.84	16.84	19.83	25.82
14	2.45	3.12	3.60	4.24	5.52		69	11.00	14.04	17.08	20.12	26.20
15	2.60	3.32	3.84	4.52	5.89		70	11.16	14.25	17.33	20.41	26.58
16	2.76	3.53	4.08	4.80	6.25		71	11.31	14.44	17.56	20.69	26.95
17	2.91	3.72	4.32	5.09	6.63		72	11.47	14.64	17.80	20.98	27.32
18	3.07	3.92	4.57	5.37	6.99		73	11.62	14.84	18.04	21.26	27.68
19	3.23	4.12	4.80	2.66	7.36		74	11.78	15.04	18.29	21.55	28.05
20	3.38	4.31	5.25	6.19	8.06		75	11.94	15.24	18.54	21.83	28.42
21	3.59	4.52	5.50	6.48	8.43		76	12.10	15.44	18.79	22.12	28.80
22	3.70	4.72	5.74	6.76	8.81		77	12.25	15.63	19.02	22.40	29.16
23	3.86	4.92	5.98	7.05	9.19		78	12.41	15.83	19.26	22.68	29.53
24	4.10	5.11	6.23	7.33	9.54		79	12.56	16.03	19.49	22.96	29.90
25	4.16	5.31	6.47	7.61	9.91		80	12.72	16.23	19.73	23.25	30.27
26	4.31	5.51	6.70	7.90	10.28		81	12.88	16.42	19.98	23.53	30.64
27	4.47	5.72	6.95	8.19	10.66		82	13.04	16.62	20.23	23.82	31.02
28	4.64	5.92	7.19	8.47	11.04		83	13.19	16.82	20.47	24.10	31.38
29	4.79	6.12	7.44	8.76	11.40		84	13.35	17.03	20.71	24.39	31.75
30	4.94	6.31	7.67	9.04	11.77		85	13.50	17.22	20.95	24.67	32.13
31	5.11	6.51	7.91	9.32	12.13		86	13.65	17.42	21.19	24.96	32.49
32	5.25	6.71	8.15	9.60	12.50		87	13.81	17.62	21.43	25.24	32.87
33	5.41	6.90	8.39	9.89	12.88		88	13.97	17.83	21.68	25.53	33.25
34	5.57	7.10	8.64	10.18	13.26		89	14.12	18.02	21.92	25.81	33.61
35	5.72	7.30	8.88	10.46	13.62		90	14.28	18.22	22.16	26.10	33.98
36	5.88	7.50	9.13	10.74	13.98		91	14.43	18.41	22.40	26.38	34.37
37	6.04	7.69	9.36	11.02	14.35		92	14.58	18.61	22.64	26.66	34.71
38	6.19	7.89	9.60	11.31	14.72		93	14.74	18.81	22.88	26.95	35.08
39	6.34	8.11	9.85	11.60	15.10		94	14.90	19.01	23.12	27.24	35.46
40	6.50	8.30	10.09	11.88	15.48		95	15.05	19.21	23.36	27.52	35.82
41	6.65	8.50	10.33	12.16	15.84		96	15.21	19.41	23.61	27.80	36.19
42	6.81	8.69	10.56	12.45	16.21		97	15.36	19.60	23.84	28.08	36.56
43	6.96	8.88	10.80	12.73	16.57		98	15.52	19.80	24.08	28.37	36.93
44	7.12	9.08	11.05	13.02	16.94		99	15.67	20.00	24.33	28.65	37.31
45	7.27	9.28	11.29	13.31	17.32		100	15.83	20.21	24.58	28.94	37.69
46	7.43	9.48	11.54	13.60	17.70		101	15.98	20.40	24.81	29.22	38.05
47	7.59	9.68	11.78	13.87	18.06		102	16.14	20.60	25.05	29.51	38.42
48	7.75	9.88	12.02	14.15	18.42		103	16.29	20.79	25.29	29.79	38.78
49	7.90	10.08	12.25	14.43	18.79		104	16.45	20.99	25.53	30.08	39.15
50	8.05	10.28	12.49	14.72	19.17		105	16.61	21.19	25.78	30.36	39.52
51	8.27	10.48	12.93	15.00	19.54		106	16.77	21.39	26.03	30.65	39.90
52	8.37	10.68	12.98	15.29	19.92		107	16.92	21.58	26.26	30.93	40.26
53	8.52	10.87	13.22	15.57	20.28		108	17.07	21.78	26.50	31.21	40.63
54	8.68	11.07	13.47	15.86	20.65		109	17.23	21.98	26.74	31.49	41.00
55	8.83	11.26	13.70	16.14	21.01		110	17.39	22.18	26.98	31.78	41.38
56	8.98	11.46	13.94	16.42	21.38		111	17.55	22.38	27.22	32.06	41.75
57	9.14	11.66	14.19	16.71	21.76		112	17.71	22.59	27.47	32.35	42.13
58	9.3	11.87	14.44	17.00	22.14		113	17.86	22.78	27.71	32.63	42.49
59	9.45	12.07	14.67	17.28	22.50		114	18.01	22.98	27.95	32.92	42.86
60	9.61	12.27	14.91	17.57	22.87		115	18.16	23.17	28.19	33.20	43.22
61	9.76	12.46	15.15	17.84	23.24		116	18.31	23.37	28.43	33.48	43.59
62	9.92	12.65	15.40	18.12	23.61		117	18.47	23.57	28.67	33.77	43.97
63	10.08	12.85	15.64	18.41	23.98		118	18.63	23.78	28.92	34.06	44.35
64	10.24	13.06	15.88	18.71	24.36		119	18.79	23.98	29.16	34.35	44.72
65	10.39	13.25	16.12	18.99	24.72		120	18.95	24.18	29.40	34.63	45.09
66	10.55	13.45	16.36	19.27	25.09							

Single Wall Rectangular Duct - Clutcher Size Calculation Chart - Table B-17												
Spread Horseshoe at 60° Hanging Configuration - 12' Hanger Spacing												
Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot						Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot				
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge			26 gauge	24 gauge	22 gauge	20 gauge	18 gauge
12	2.14	2.73	3.12	3.67	4.77		67	10.70	13.64	16.60	19.55	25.45
13	2.30	2.93	3.35	3.95	5.14		68	10.85	13.84	16.84	19.83	25.82
14	2.45	3.12	3.60	4.24	5.52		69	11.00	14.04	17.08	20.12	26.20
15	2.60	3.32	3.84	4.52	5.89		70	11.16	14.25	17.33	20.41	26.58
16	2.76	3.53	4.08	4.80	6.25		71	11.31	14.44	17.56	20.69	26.95
17	2.91	3.72	4.32	5.09	6.63		72	11.47	14.64	17.80	20.98	27.32
18	3.07	3.92	4.57	5.37	6.99		73	11.62	14.84	18.04	21.26	27.68
19	3.23	4.12	4.80	2.66	7.36		74	11.78	15.04	18.29	21.55	28.05
20	3.38	4.31	5.25	6.19	8.06		75	11.94	15.24	18.54	21.83	28.42
21	3.59	4.52	5.50	6.48	8.43		76	12.10	15.44	18.79	22.12	28.80
22	3.70	4.72	5.74	6.76	8.81		77	12.25	15.63	19.02	22.40	29.16
23	3.86	4.92	5.98	7.05	9.19		78	12.41	15.83	19.26	22.68	29.53
24	4.10	5.11	6.23	7.33	9.54		79	12.56	16.03	19.49	22.96	29.90
25	4.16	5.31	6.47	7.61	9.91		80	12.72	16.23	19.73	23.25	30.27
26	4.31	5.51	6.70	7.90	10.28		81	12.88	16.42	19.98	23.53	30.64
27	4.47	5.72	6.95	8.19	10.66		82	13.04	16.62	20.23	23.82	31.02
28	4.64	5.92	7.19	8.47	11.04		83	13.19	16.82	20.47	24.10	31.38
29	4.79	6.12	7.44	8.76	11.40		84	13.35	17.03	20.71	24.39	31.75
30	4.94	6.31	7.67	9.04	11.77		85	13.50	17.22	20.95	24.67	32.13
31	5.11	6.51	7.91	9.32	12.13		86	13.65	17.42	21.19	24.96	32.49
32	5.25	6.71	8.15	9.60	12.50		87	13.81	17.62	21.43	25.24	32.87
33	5.41	6.90	8.39	9.89	12.88		88	13.97	17.83	21.68	25.53	33.25
34	5.57	7.10	8.64	10.18	13.26		89	14.12	18.02	21.92	25.81	33.61
35	5.72	7.30	8.88	10.46	13.62		90	14.28	18.22	22.16	26.10	33.98
36	5.88	7.50	9.13	10.74	13.98		91	14.43	18.41	22.40	26.38	34.37
37	6.04	7.69	9.36	11.02	14.35		92	14.58	18.61	22.64	26.66	34.71
38	6.19	7.89	9.60	11.31	14.72		93	14.74	18.81	22.88	26.95	35.08
39	6.34	8.11	9.85	11.60	15.10		94	14.90	19.01	23.12	27.24	35.46
40	6.50	8.30	10.09	11.88	15.48		95	15.05	19.21	23.36	27.52	35.82
41	6.65	8.50	10.33	12.16	15.84		96	15.21	19.41	23.61	27.80	36.19
42	6.81	8.69	10.56	12.45	16.21		97	15.36	19.60	23.84	28.08	36.56
43	6.96	8.88	10.80	12.73	16.57		98	15.52	19.80	24.08	28.37	36.93
44	7.12	9.08	11.05	13.02	16.94		99	15.67	20.00	24.33	28.65	37.31
45	7.27	9.28	11.29	13.31	17.32		100	15.83	20.21	24.58	28.94	37.69
46	7.43	9.48	11.54	13.60	17.70		101	15.98	20.40	24.81	29.22	38.05
47	7.59	9.68	11.78	13.87	18.06		102	16.14	20.60	25.05	29.51	38.42
48	7.75	9.88	12.02	14.15	18.42		103	16.29	20.79	25.29	29.79	38.78
49	7.90	10.08	12.25	14.43	18.79		104	16.45	20.99	25.53	30.08	39.15
50	8.05	10.28	12.49	14.72	19.17		105	16.61	21.19	25.78	30.36	39.52
51	8.27	10.48	12.93	15.00	19.54		106	16.77	21.39	26.03	30.65	39.90
52	8.37	10.68	12.98	15.29	19.92		107	16.92	21.58	26.26	30.93	40.26
53	8.52	10.87	13.22	15.57	20.28		108	17.07	21.78	26.50	31.21	40.63
54	8.68	11.07	13.47	15.86	20.65		109	17.23	21.98	26.74	31.49	41.00
55	8.83	11.26	13.70	16.14	21.01		110	17.39	22.18	26.98	31.78	41.38
56	8.98	11.46	13.94	16.42	21.38		111	17.55	22.38	27.22	32.06	41.75
57	9.14	11.66	14.19	16.71	21.76		112	17.71	22.59	27.47	32.35	42.13
58	9.3	11.87	14.44	17.00	22.14		113	17.86	22.78	27.71	32.63	42.49
59	9.45	12.07	14.67	17.28	22.50		114	18.01	22.98	27.95	32.92	42.86
60	9.61	12.27	14.91	17.57	22.87		115	18.16	23.17	28.19	33.20	43.22
61	9.76	12.46	15.15	17.84	23.24		116	18.31	23.37	28.43	33.48	43.59
62	9.92	12.65	15.40	18.12	23.61		117	18.47	23.57	28.67	33.77	43.97
63	10.08	12.85	15.64	18.41	23.98		118	18.63	23.78	28.92	34.06	44.35
64	10.24	13.06	15.88	18.71	24.36		119	18.79	23.98	29.16	34.35	44.72
65	10.39	13.25	16.12	18.99	24.72		120	18.95	24.18	29.40	34.63	45.09
66	10.55	13.45	16.36	19.27	25.09							

Single Wall Rectangular Duct - Clutcher Size Calculation Chart - Table B-18												
Spread Horseshoe at 60° Hanging Configuration - 10' Hanger Spacing												
Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot						Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot				
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge			26 gauge	24 gauge	22 gauge	20 gauge	18 gauge
12	2.14	2.73	3.12	3.67	4.77		67	10.70	13.64	16.60	19.55	25.45
13	2.30	2.93	3.35	3.95	5.14		68	10.85	13.84	16.84	19.83	25.82
14	2.45	3.12	3.60	4.24	5.52		69	11.00	14.04	17.08	20.12	26.20
15	2.60	3.32	3.84	4.52	5.89		70	11.16	14.25	17.33	20.41	26.58
16	2.76	3.53	4.08	4.80	6.25		71	11.31	14.44	17.56	20.69	26.95
17	2.91	3.72	4.32	5.09	6.63		72	11.47	14.64	17.80	20.98	27.32
18	3.07	3.92	4.57	5.37	6.99		73	11.62	14.84	18.04	21.26	27.68
19	3.23	4.12	4.80	2.66	7.36		74	11.78	15.04	18.29	21.55	28.05
20	3.38	4.31	5.25	6.19	8.06		75	11.94	15.24	18.54	21.83	28.42
21	3.59	4.52	5.50	6.48	8.43		76	12.10	15.44	18.79	22.12	28.80
22	3.70	4.72	5.74	6.76	8.81		77	12.25	15.63	19.02	22.40	29.16
23	3.86	4.92	5.98	7.05	9.19		78	12.41	15.83	19.26	22.68	29.53
24	4.10	5.11	6.23	7.33	9.54		79	12.56	16.03	19.49	22.96	29.90
25	4.16	5.31	6.47	7.61	9.91		80	12.72	16.23	19.73	23.25	30.27
26	4.31	5.51	6.70	7.90	10.28		81	12.88	16.42	19.98	23.53	30.64
27	4.47	5.72	6.95	8.19	10.66		82	13.04	16.62	20.23	23.82	31.02
28	4.64	5.92	7.19	8.47	11.04		83	13.19	16.82	20.47	24.10	31.38
29	4.79	6.12	7.44	8.76	11.40		84	13.35	17.03	20.71	24.39	31.75
30	4.94	6.31	7.67	9.04	11.77		85	13.50	17.22	20.95	24.67	32.13
31	5.11	6.51	7.91	9.32	12.13		86	13.65	17.42	21.19	24.96	32.49
32	5.25	6.71	8.15	9.60	12.50		87	13.81	17.62	21.43	25.24	32.87
33	5.41	6.90	8.39	9.89	12.88		88	13.97	17.83	21.68	25.53	33.25
34	5.57	7.10	8.64	10.18	13.26		89	14.12	18.02	21.92	25.81	33.61
35	5.72	7.30	8.88	10.46	13.62		90	14.28	18.22	22.16	26.10	33.98
36	5.88	7.50	9.13	10.74	13.98		91	14.43	18.41	22.40	26.38	34.37
37	6.04	7.69	9.36	11.02	14.35		92	14.58	18.61	22.64	26.66	34.71
38	6.19	7.89	9.60	11.31	14.72		93	14.74	18.81	22.88	26.95	35.08
39	6.34	8.11	9.85	11.60	15.10		94	14.90	19.01	23.12	27.24	35.46
40	6.50	8.30	10.09	11.88	15.48		95	15.05	19.21	23.36	27.52	35.82
41	6.65	8.50	10.33	12.16	15.84		96	15.21	19.41	23.61	27.80	36.19
42	6.81	8.69	10.56	12.45	16.21		97	15.36	19.60	23.84	28.08	36.56
43	6.96	8.88	10.80	12.73	16.57		98	15.52	19.80	24.08	28.37	36.93
44	7.12	9.08	11.05	13.02	16.94		99	15.67	20.00	24.33	28.65	37.31
45	7.27	9.28	11.29	13.31	17.32		100	15.83	20.21	24.58	28.94	37.69
46	7.43	9.48	11.54	13.60	17.70		101	15.98	20.40	24.81	29.22	38.05
47	7.59	9.68	11.78	13.87	18.06		102	16.14	20.60	25.05	29.51	38.42
48	7.75	9.88	12.02	14.15	18.42		103	16.29	20.79	25.29	29.79	38.78
49	7.90	10.08	12.25	14.43	18.79		104	16.45	20.99	25.53	30.08	39.15
50	8.05	10.28	12.49	14.72	19.17		105	16.61	21.19	25.78	30.36	39.52
51	8.27	10.48	12.93	15.00	19.54		106	16.77	21.39	26.03	30.65	39.90
52	8.37	10.68	12.98	15.29	19.92		107	16.92	21.58	26.26	30.93	40.26
53	8.52	10.87	13.22	15.57	20.28		108	17.07	21.78	26.50	31.21	40.63
54	8.68	11.07	13.47	15.86	20.65		109	17.23	21.98	26.74	31.49	41.00
55	8.83	11.26	13.70	16.14	21.01		110	17.39	22.18	26.98	31.78	41.38
56	8.98	11.46	13.94	16.42	21.38		111	17.55	22.38	27.22	32.06	41.75
57	9.14	11.66	14.19	16.71	21.76		112	17.71	22.59	27.47	32.35	42.13
58	9.3	11.87	14.44	17.00	22.14		113	17.86	22.78	27.71	32.63	42.49
59	9.45	12.07	14.67	17.28	22.50		114	18.01	22.98	27.95	32.92	42.86
60	9.61	12.27	14.91	17.57	22.87		115	18.16	23.17	28.19	33.20	43.22
61	9.76	12.46	15.15	17.84	23.24		116	18.31	23.37	28.43	33.48	43.59
62	9.92	12.65	15.40	18.12	23.61		117	18.47	23.57	28.67	33.77	43.97
63	10.08	12.85	15.64	18.41	23.98		118	18.63	23.78	28.92	34.06	44.35
64	10.24	13.06	15.88	18.71	24.36		119	18.79	23.98	29.16	34.35	44.72
65	10.39	13.25	16.12	18.99	24.72		120	18.95	24.18	29.40	34.63	45.09
66	10.55	13.45	16.36	19.27	25.09							

Single Wall Rectangular Duct - Clutcher Size Calculation Chart - Table B-19												
Spread Horseshoe at 60° Hanging Configuration - 6' Hanger Spacing												
Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot						Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot				
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge			26 gauge	24 gauge	22 gauge	20 gauge	18 gauge
12	2.14	2.73	3.12	3.67	4.77		67	10.70	13.64	16.60	19.55	25.45
13	2.30	2.93	3.35	3.95	5.14		68	10.85	13.84	16.84	19.83	25.82
14	2.45	3.12	3.60	4.24	5.52		69	11.00	14.04	17.08	20.12	26.20
15	2.60	3.32	3.84	4.52	5.89		70	11.16	14.25	17.33	20.41	26.58
16	2.76	3.53	4.08	4.80	6.25		71	11.31	14.44	17.56	20.69	26.95
17	2.91	3.72	4.32	5.09	6.63		72	11.47	14.64	17.80	20.98	27.32
18	3.07	3.92	4.57	5.37	6.99		73	11.62	14.84	18.04	21.26	27.68
19	3.23	4.12	4.80	2.66	7.36		74	11.78	15.04	18.29	21.55	28.05
20	3.38	4.31	5.25	6.19	8.06		75	11.94	15.24	18.54	21.83	28.42
21	3.59	4.52	5.50	6.48	8.43		76	12.10	15.44	18.79	22.12	28.80
22	3.70	4.72	5.74	6.76	8.81		77	12.25	15.63	19.02	22.40	29.16
23	3.86	4.92	5.98	7.05	9.19		78	12.41	15.83	19.26	22.68	29.53
24	4.10	5.11	6.23	7.33	9.54		79	12.56	16.03	19.49	22.96	29.90
25	4.16	5.31	6.47	7.61	9.91		80	12.72	16.23	19.73	23.25	30.27
26	4.31	5.51	6.70	7.90	10.28		81	12.88	16.42	19.98	23.53	30.64
27	4.47	5.72	6.95	8.19	10.66		82	13.04	16.62	20.23	23.82	31.02
28	4.64	5.92	7.19	8.47	11.04		83	13.19	16.82	20.47	24.10	31.38
29	4.79	6.12	7.44	8.76	11.40		84	13.35	17.03	20.71	24.39	31.75
30	4.94	6.31	7.67	9.04	11.77		85	13.50	17.22	20.95	24.67	32.13
31	5.11	6.51	7.91	9.32	12.13		86	13.65	17.42	21.19	24.96	32.49
32	5.25	6.71	8.15	9.60	12.50		87	13.81	17.62	21.43	25.24	32.87
33	5.41	6.90	8.39	9.89	12.88		88	13.97	17.83	21.68	25.53	33.25
34	5.57	7.10	8.64	10.18	13.26		89	14.12	18.02	21.92	25.81	33.61
35	5.72	7.30	8.88	10.46	13.62		90	14.28	18.22	22.16	26.10	33.98
36	5.88	7.50	9.13	10.74	13.98		91	14.43	18.41	22.40	26.38	34.37
37	6.04	7.69	9.36	11.02	14.35		92	14.58	18.61	22.64	26.66	34.71
38	6.19	7.89	9.60	11.31	14.72		93	14.74	18.81	22.88	26.95	35.08
39	6.34	8.11	9.85	11.60	15.10		94	14.90	19.01	23.12	27.24	35.46
40	6.50	8.30	10.09	11.88	15.48		95	15.05	19.21	23.36	27.52	35.82
41	6.65	8.50	10.33	12.16	15.84		96	15.21	19.41	23.61	27.80	36.19
42	6.81	8.69	10.56	12.45	16.21		97	15.36	19.60	23.84	28.08	36.56
43	6.96	8.88	10.80	12.73	16.57		98	15.52	19.80	24.08	28.37	36.93
44	7.12	9.08	11.05	13.02	16.94		99	15.67	20.00	24.33	28.65	37.31
45	7.27	9.28	11.29	13.31	17.32		100	15.83	20.21	24.58	28.94	37.69
46	7.43	9.48	11.54	13.60	17.70		101	15.98	20.40	24.81	29.22	38.05
47	7.59	9.68	11.78	13.87	18.06		102	16.14	20.60	25.05	29.51	38.42
48	7.75	9.88	12.02	14.15	18.42		103	16.29	20.79	25.29	29.79	38.78
49	7.90	10.08	12.25	14.43	18.79		104	16.45	20.99	25.53	30.08	39.15
50	8.05	10.28	12.49	14.72	19.17		105	16.61	21.19	25.78	30.36	39.52
51	8.27	10.48	12.93	15.00	19.54		106	16.77	21.39	26.03	30.65	39.90
52	8.37	10.68	12.98	15.29	19.92		107	16.92	21.58	26.26	30.93	40.26
53	8.52	10.87	13.22	15.57	20.28		108	17.07	21.78	26.50	31.21	40.63
54	8.68	11.07	13.47	15.86	20.65		109	17.23	21.98	26.74	31.49	41.00
55	8.83	11.26	13.70	16.14	21.01		110	17.39	22.18	26.98	31.78	41.38
56	8.98	11.46	13.94	16.42	21.38		111	17.55	22.38	27.22	32.06	41.75
57	9.14	11.66	14.19	16.71	21.76		112	17.71	22.59	27.47	32.35	42.13
58	9.3	11.87	14.44	17.00	22.14		113	17.86	22.78	27.71	32.63	42.49
59	9.45	12.07	14.67	17.28	22.50		114	18.01	22.98	27.95	32.92	42.86
60	9.61	12.27	14.91	17.57	22.87		115	18.16	23.17	28.19	33.20	43.22
61	9.76	12.46	15.15	17.84	23.24		116	18.31	23.37	28.43	33.48	43.59
62	9.92	12.65	15.40	18.12	23.61		117	18.47	23.57	28.67	33.77	43.97
63	10.08	12.85	15.64	18.41	23.98		118	18.63	23.78	28.92	34.06	44.35
64	10.24	13.06	15.88	18.71	24.36		119	18.79	23.98	29.16	34.35	44.72
65	10.39	13.25	16.12	18.99	24.72		120	18.95	24.18	29.40	34.63	45.09
66	10.55	13.45	16.36	19.27	25.09							

Single Wall Rectangular Duct - Clutcher Size Calculation Chart - Table B-20												
Spread Horseshoe at 60° Hanging Configuration - 5' Hanger Spacing												
Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot						Duct Size	Approx. Rectangular Duct Weight/Lbs. per Foot				
	26 gauge	24 gauge	22 gauge	20 gauge	18 gauge			26 gauge	24 gauge	22 gauge	20 gauge	18 gauge
12	2.14	2.73	3.12	3.67	4.77		67	10.70	13.64	16.60	19.55	25.45
13	2.30	2.93	3.35	3.95	5.14		68	10.85	13.84	16.84	19.83	25.82
14	2.45	3.12	3.60	4.24	5.52		69	11.00	14.04	17.08	20.12	26.20
15	2.60	3.32	3.84	4.52	5.89		70	11.16	14.25	17.33	20.41	26.58
16	2.76	3.53	4.08	4.80	6.25		71	11.31	14.44	17.56	20.69	26.95
17	2.91	3.72	4.32	5.09	6.63		72	11.47	14.64	17.80	20.98	27.32
18	3.07	3.92	4.57	5.37	6.99		73	11.62	14.84	18.04	21.26	27.68
19	3.23	4.12	4.80	2.66	7.36		74	11.78	15.04	18.29	21.55	28.05
20	3.38	4.31	5.25	6.19	8.06		75	11.94	15.24	18.54	21.83	28.42
21	3.59	4.52	5.50	6.48	8.43		76	12.10	15.44	18.79	22.12	28.80
22	3.70	4.72	5.74	6.76	8.81		77	12.25	15.63	19.02	22.40	29.16
23	3.86	4.92	5.98	7.05	9.19		78	12.41	15.83	19.26	22.68	29.53
24	4.10	5.11	6.23	7.33	9.54		79	12.56	16.03	19.49	22.96	29.90
25	4.16	5.31	6.47	7.61	9.91		80	12.72	16.23	19.73	23.25	30.27
26	4.31	5.51	6.70	7.90	10.28		81	12.88	16.42	19.98	23.53	30.64
27	4.47	5.72	6.95	8.19	10.66		82	13.04	16.62	20.23	23.82	31.02
28	4.64	5.92	7.19	8.47	11.04		83	13.19	16.82	20.47	24.10	31.38
29	4.79	6.12	7.44	8.76	11.40		84	13.35	17.03	20.71	24.39	31.75
30	4.94	6.31	7.67	9.04	11.77		85	13.50	17.22	20.95	24.67	32.13
31	5.11	6.51	7.91	9.32	12.13		86	13.65	17.42	21.19	24.96	32.49
32	5.25	6.71	8.15	9.60	12.50		87	13.81	17.62	21.43	25.24	32.87
33	5.41	6.90	8.39	9.89	12.88		88	13.97	17.83	21.68	25.53	33.25
34	5.57	7.10	8.64	10.18	13.26		89	14.12	18.02	21.92	25.81	33.61
35	5.72	7.30	8.88	10.46	13.62		90	14.28	18.22	22.16	26.10	33.98
36	5.88	7.50	9.13	10.74	13.98		91	14.43	18.41	22.40	26.38	34.37
37	6.04	7.69	9.36	11.02	14.35		92	14.58	18.61	22.64	26.66	34.71
38	6.19	7.89	9.60	11.31	14.72		93	14.74	18.81	22.88	26.95	35.08
39	6.34	8.11	9.85	11.60	15.10		94	14.90	19.01	23.12	27.24	35.46
40	6.50	8.30	10.09	11.88	15.48		95	15.05	19.21	23.36	27.52	35.82
41	6.65	8.50	10.33	12.16	15.84		96	15.21	19.41	23.61	27.80	36.19
42	6.81	8.69	10.56	12.45	16.21		97	15.36	19.60	23.84	28.08	36.56
43	6.96	8.88	10.80	12.73	16.57		98	15.52	19.80	24.08	28.37	36.93
44	7.12	9.08	11.05	13.02	16.94		99	15.67	20.00	24.33	28.65	37.31
45	7.27	9.28	11.29	13.31	17.32		100	15.83	20.21	24.58	28.94	37.69
46	7.43	9.48	11.54	13.60	17.70		101	15.98	20.40	24.81	29.22	38.05
47	7.59	9.68	11.78	13.87	18.06		102	16.14	20.60	25.05	29.51	38.42
48	7.75	9.88	12.02	14.15	18.42		103	16.29	20.79	25.29	29.79	38.78
49	7.90	10.08	12.25	14.43	18.79		104	16.45	20.99	25.53	30.08	39.15
50	8.05	10.28	12.49	14.72	19.17		105	16.61	21.19	25.78	30.36	39.52
51	8.27	10.48	12.93	15.00	19.54		106	16.77	21.39	26.03	30.65	39.90
52	8.37	10.68	12.98	15.29	19.92		107	16.92	21.58	26.26	30.93	40.26
53	8.52	10.87	13.22	15.57	20.28		108	17.07	21.78	26.50	31.21	40.63
54	8.68	11.07	13.47	15.86	20.65		109	17.23	21.98	26.74	31.49	41.00
55	8.83	11.26	13.70	16.14	21.01		110	17.39	22.18	26.98	31.78	41.38
56	8.98	11.46	13.94	16.42	21.38		111	17.55	22.38	27.22	32.06	41.75
57	9.14	11.66	14.19	16.71	21.76		112	17.71	22.59	27.47	32.35	42.13
58	9.3	11.87	14.44	17.00	22.14		113	17.86	22.78	27.71	32.63	42.49
59	9.45	12.07	14.67	17.28	22.50		114	18.01	22.98	27.95	32.92	42.86
60	9.61	12.27	14.91	17.57	22.87		115	18.16	23.17	28.19	33.20	43.22
61	9.76	12.46	15.15	17.84	23.24		116	18.31	23.37	28.43	33.48	43.59
62	9.92	12.65	15.40	18.12	23.61		117	18.47	23.57	28.67	33.77	43.97
63	10.08	12.85	15.64	18.41	23.98		118	18.63	23.78	28.92	34.06	44.35
64	10.24	13.06	15.88	18.71	24.36		119	18.79	23.98	29.16	34.35	44.72
65	10.39	13.25	16.12	18.99	24.72		120	18.95	24.18	29.40	34.63	45.09
66	10.55	13.45	16.36	19.27	25.09							

Notes:

a. Maximum hanger spacing of 12 ft is per SMACNA HVAC Duct Construction Standards Metal and Flexible Third Edition.
b. Tables include a 15% weight increase to allow for variation and simple connectors.
c. Load on the Clutchers must be evenly distributed.
d. Never use Clutchers for lifting rectangular duct.
e. Always check to ensure locking mechanism is fully engaged.
f. Load must be fully supported before adjusting Clutcher.