



ESPIRO

DUCTOS INDUSTRIALES

Single Wall Round Spiral Pipe and Fitting Standards

		Dimensions	
A = Inlet Size		$K = 5\frac{1}{4}"$	$V = (A/2 \times 1.414) + ((C+2)/2) + 6$
B = Outlet Size		L = Length	$W = (C+2) \times 1.414 + 4$
C = Branch Size		O = Offsetting Amount	$X = A - B$ (with 4" minimum)
D = Branch Size		R = $1.5 \times A$	$Y = (1.414 \times C) + 4$
H = 3" if C = 3" to 8"		S = 2	$Z = C + H + 4$
6" if C = 9" to 16"		T = $A/4 + 2$	* = Consult Factory
9" if C = 17" to 24"		U = $A \times 2 + 2$	
12" if C = 25" & Up			

<input type="checkbox"/> SP	<input type="checkbox"/> PP	<input type="checkbox"/> FF
	<p>PIPE TO PIPE</p>	<p>FITTING TO FITTING</p>
Spiral Pipe	Pipe-to-Pipe Coupling	Fitting-to-Fitting Coupling

<input type="checkbox"/> B1	<input type="checkbox"/> EP	<input type="checkbox"/> EC
	<p>END PLUG</p>	<p>END CAP</p>
Bellmouth	End Plug	End Cap

<input type="checkbox"/> SE45	<input type="checkbox"/> SE90	<input type="checkbox"/> EV90
<p>A = 3" Thru 10"</p>	<p>A = 3" Thru 10"</p>	<p>A = 3" Thru 60"</p>
Stamped Elbows		Mitered Elbow

<input type="checkbox"/> E1 Thru E36	<input type="checkbox"/> ET90
<p>A = 3" Thru 24"</p>	<p>A = 3" Thru 60"</p>
2 Gore Elbows	Elbow w/Tap



Single Wall Spiral Duct --- Weights & Area

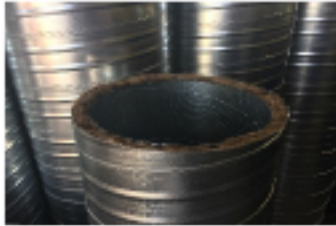
Diameter	Pounds per Lineal Foot*						Surface Area Ft. ² per Lineal Foot	Cross Sectional Area Ft. ²
	26 ga.	24 ga.	22 ga.	20 ga.	18 ga.	16 ga.		
3" Ø	0.87	1.10	1.35	1.63			0.785	0.049
4" Ø	1.16	1.46	1.80	2.17			1.047	0.087
5" Ø	1.45	1.83	2.25	2.71			1.309	0.136
6" Ø	1.74	2.20	2.70	3.25	4.25	5.33	1.571	0.196
7" Ø	2.03	2.56	3.15	3.80	4.96	6.22	1.833	0.267
8" Ø	2.32	2.93	3.60	4.34	5.67	7.11	2.094	0.349
9" Ø	2.61	3.30	4.05	4.88	6.38	7.99	2.356	0.442
10" Ø	2.90	3.66	4.50	5.42	7.09	8.88	2.618	0.545
11" Ø	3.19	4.03	4.95	5.97	7.80	9.77	2.880	0.660
12" Ø	3.48	4.39	5.40	6.51	8.51	10.66	3.142	0.785
13" Ø	3.77	4.76	5.85	7.05	9.21	11.55	3.403	0.922
14" Ø	4.06	5.13	6.30	7.59	9.92	12.43	3.665	1.069
16" Ø	4.35	5.49	6.75	8.14	10.63	13.32	3.927	1.227
18" Ø	4.65	5.86	7.20	8.68	11.34	14.21	4.189	1.396
18" Ø	5.23	6.59	8.10	9.76	12.76	15.99	4.712	1.767
19" Ø	5.52	6.96	8.55	10.31	13.47	16.88	4.974	1.969
20" Ø	5.81	7.32	9.00	10.85	14.18	17.76	5.236	2.182
21" Ø	6.10	7.69	9.45	11.39	14.88	18.65	5.498	2.405
22" Ø	6.39	8.06	9.90	11.93	15.59	19.54	5.760	2.640
23" Ø	6.68	8.42	10.35	12.48	16.30	20.43	6.021	2.885
24" Ø	6.97	8.79	10.80	13.02	17.01	21.32	6.283	3.142
26" Ø	7.26	9.16	11.24	13.56	17.72	22.20	6.545	3.409
28" Ø	7.55	9.52	11.69	14.10	18.43	23.09	6.807	3.687
28" Ø	8.13	10.25	12.59	15.19	19.85	24.87	7.330	4.276
30" Ø	8.71	10.99	13.49	16.27	21.26	26.65	7.854	4.909
32" Ø	9.29	11.72	14.39	17.36	22.68	28.42	8.378	5.585
34" Ø	9.87	12.45	15.29	18.44	24.10	30.20	8.901	6.305
36" Ø	10.45	13.18	16.19	19.53	25.52	31.97	9.425	7.069
38" Ø	11.03	13.92	17.09	20.61	26.93	33.75	9.948	7.876
40" Ø	11.61	14.65	17.99	21.70	28.35	35.53	10.472	8.727
42" Ø	12.19	15.38	18.89	22.78	29.77	37.30	10.996	9.621
44" Ø	12.77	16.11	19.79	23.87	31.19	39.08	11.519	10.559
46" Ø	13.36	16.85	20.69	24.95	32.60	40.86	12.043	11.541
48" Ø	13.94	17.58	21.59	26.04	34.02	42.63	12.566	12.566
50" Ø	14.52	18.31	22.49	27.12	35.44	44.41	13.090	13.635
52" Ø	15.10	19.04	23.39	28.21	36.86	46.19	13.614	14.748
54" Ø	15.68	19.78	24.29	29.29	38.27	47.96	14.137	15.904
56" Ø	16.26	20.51	25.19	30.38	39.69	49.74	14.661	17.104
58" Ø	16.84	21.24	26.09	31.46	41.11	51.51	15.184	18.348
60" Ø	17.42	21.97	26.99	32.55	42.53	53.29	15.708	19.635
62" Ø	22.71	27.89	33.63	43.94	55.07		16.232	20.966
64" Ø		23.44	28.79	34.72	45.36	56.84	16.755	22.340
66" Ø		24.17	29.69	35.80	46.78	58.62	17.279	23.758
68" Ø		24.90	30.59	36.89	48.20	60.40	17.802	25.220
70" Ø		25.64	31.49	37.97	49.61	62.17	18.326	26.725
72" Ø		26.37	32.39	39.06	51.03	63.95	18.850	28.274
74" Ø		27.10	33.28	40.14	52.45	65.73	19.373	29.867
76" Ø		27.83	34.18	41.23	53.87	67.50	19.897	31.503
78" Ø		28.57	35.08	42.31	55.28	69.28	20.420	33.183
80" Ø		29.30	35.98	43.40	56.70	71.05	20.944	34.907
82" Ø		30.03	36.88	44.48	58.12	72.83	21.468	36.674
84" Ø		30.76	37.78	45.57	59.54	74.61	21.991	38.485
86" Ø		31.50	38.68	46.65	60.95	76.38	22.515	40.339
88" Ø		32.23	39.58	47.74	62.37	78.16	23.038	42.237
90" Ø		32.96	40.48	48.82	63.79	79.94	23.562	44.179
92" Ø		33.69	41.38	49.91	65.21	81.71	24.086	46.164

The RED highlighted blocks are SPOT's standard construction for SMACNA 0-10' WG Construction.
 * Nominal spiral ducts system weights are based upon the following: 1. 80% of duct surface area is spiral pipe versus 20% of duct surface area to be fittings
 2. fittings are one even gauge heavier than the spiral pipe



Insulated Round Ducts

Double-wall Insulated Round Ducts



Inner Metal Shell Material

- Galvanized Steel
- Aluminum
- 304L Stainless Steel
- Other _____

Inner Metal Shell

Pipe

- Solid Metal Liner
- Perforated Metal Liner
- Perforated metal with erosion barrier

Fittings

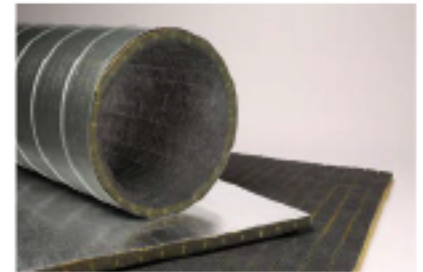
- Solid Metal Liner
- Perforated Metal Liner
- Perforated metal with erosion barrier

Insulation Layer

- Fiber Glass Duct Liner
- Thickness**
- 1"
 - 2"
 - Other _____

- Elastomeric Foam Duct Liner
- Thickness**
- 1"
 - 2"
 - Other _____

Single-wall Insulated Round Ducts



Insulation Layer

- JM Spiracoustic Plus*
- Thickness**
- 1"
 - 1 1/2"
 - 2"

Outer Metal Shell

Material

- G90 Galvanized Steel
- G60 Galvanized Steel
- Paint-Grip Mill Phosphatized
- A60 Galvannealed Steel
- Agion Anti-Microbial Steel
- Aluminum
- 304-L Stainless Steel
- 316-L Stainless Steel
- Other _____

Construction

- Spiral lockseam pipe (no corrugation)
- Corrugated Spiral lockseam pipe
- Longitudinal Seam pipe
- Tack & Sealed (fittings)
- Fully Welded (fittings)

Outer Metal Shell Gauges

- SMACNA 0 - 10' WG Construction
- Other _____

Transverse Connectors

- Slip-Joints / Couplings
- SPOT Triple-Seal Gasket System
- SPOT Flange / OD only
- Double-wall SPOT Flange
- Angle-Iron Ring (OD only)
- Other _____

Surface Preparation / Appearance

- Not Exposed (std.)
Welds painted (aluminum), labels and markings on outside
- Exposed --- to be painted
Welds not painted, removable labels
- Exposed --- not painted
Welds painted (aluminum), removable labels, no mill or shopmarkings on outside

Job Name:		
Location:	System:	
Engineer:	Contractor:	