

DIMENSIONAL DATA

R-12 COMMERCIAL



620 North Post Street • Post Falls, ID 83854 • 208.777.7444 ph 208.777.7445 fax •
www.spunstrand.com

R-12 (Insulated) Duct and Fittings – Shipping Weights

NOMINAL DIAM. (IN)	1 STRAIGHT DUCT / FT (lbs)	2 45° ELBOW (lbs)	3 90° ELBOW (lbs)	4 CON. RED. (lbs)	5 ECC. RED. (lbs)	6 END CAP (lbs)	7 TEE (lbs)	8 SINGLE 45° Y (lbs)	9 SINGLE 90° Y (lbs)	10 CROSS (lbs)	11 DOUBLE 45° Y (lbs)	12 DOUBLE 90° Y (lbs)	13 TRUE Y (lbs)	14 SADDLE TAP (lbs)	15 TRANSITIO N (lbs)	16 FLANGE (lbs)
4	3	4	7	3	5	4	4	4	7	4	7	15	4	2	11	4
5	4	4	7	4	6	4	7	7	11	11	11	18	4	2	13	4
6	4	4	7	6	7	4	7	11	15	11	15	22	7	2	15	6
7	5	6	9	7	9	6	7	13	17	13	17	24	7	4	18	6
8	5	7	13	7	9	6	11	15	20	15	20	28	9	4	20	7
9	6	7	15	9	13	6	15	18	28	18	28	42	9	4	22	7
10	7	9	17	9	13	9	17	22	31	20	31	46	13	7	26	9
12	8	13	22	9	13	9	24	29	39	29	39	61	13	7	29	11
14	9	17	29	13	17	11	31	42	52	37	53	72	20	7	35	11
16	10	18	31	15	18	13	33	44	53	41	55	74	22	9	35	11
18	11	22	41	15	20	15	41	57	63	48	68	81	29	9	39	13
20	13	29	52	18	24	20	50	70	87	57	90	103	42	15	48	17
22	14	35	59	24	31	22	57	77	96	66	105	131	46	15	77	26
24	21	42	77	28	37	28	83	120	138	101	147	184	65	20	90	29
26	22	50	88	33	42	28	88	138	166	111	175	212	74	20	98	33
28	24	52	96	37	48	29	96	175	203	120	230	249	88	20	105	35
30	26	59	101	39	50	31	111	194	240	129	240	313	100	22	112	39
32	27	65	146	41	53	33	122	206	262	140	262	337	112	24	122	41
34	31	77	147	43	57	36	149	452	280	172	308	383	131	26	129	43
36	35	90	149	46	61	39	177	280	299	205	354	429	149	28	136	46
38	37	95	164	50	68	44	185	293	319	214	367	463	173	28	142	48
40	40	100	160	53	76	48	192	306	339	223	382	496	197	29	147	50
42	40	109	194	59	76	50	208	332	393	247	409	562	247	29	157	52
44	46	115	205	62	79	46	216	338	400	253	420	571	264	31	162	53
46	49	121	216	65	83	48	223	345	407	260	431	581	278	33	168	55
48	46	133	230	66	87	44	236	358	417	273	453	599	302	33	173	59
54	58	173	313	83	109	57	358	531	606	409	671	850	402	41	184	63
60	71	208	387	92	120	74	453	700	829	516	885	1122	442	52	197	66
66	95	322	604	136	177	87	696	1111	1294	783	1399	1756	846	63	280	94
70	112	399	748	166	214	95	858	1384	1603	962	1742	2178	1115	70	151	112
*72	120	437	820	181	234	101	938	1522	1758	1054	1915	2390	1250	72	367	123

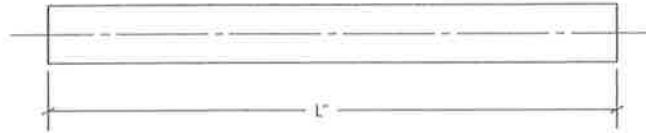
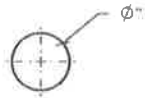
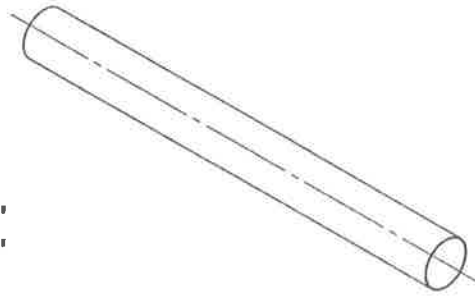
**72" and larger diameter ductwork is not included in the ICC-ES listing.*

OUTSIDE DIAMETER FOR R-12² DUCT
Tolerance +/- 1/4"

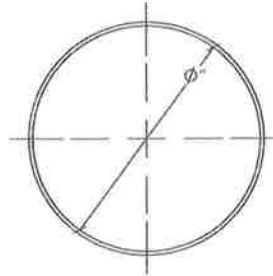
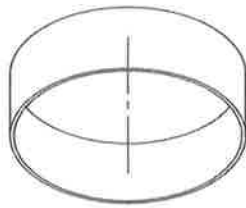
NOMINAL INSIDE DIAMETER (Inches)	INNER WALL		OUTER WALL		OUTSIDE DIAMETER
	# of PLIES	NOM. WALL THICKNESS (Inch)	# of PLIES	NOM. WALL THICKNESS (Inch)	
4	2	0.045	3	0.0675	8.7
5	2	0.045	3	0.0675	9.7
6	2	0.045	3	0.0675	10.7
7	2	0.045	3	0.0675	11.7
8	2	0.045	3	0.0675	12.7
9	2	0.045	3	0.0675	13.7
10	2	0.045	3	0.0675	14.7
12	2	0.045	3	0.0675	16.7
14	2	0.045	3	0.0675	18.7
16	2	0.045	3	0.0675	20.7
18	2	0.045	3	0.0675	22.7
20	2	0.045	3	0.0675	24.7
22	2	0.045	3	0.0675	26.7
24	3	0.0675	4	0.09	28.9
26	3	0.0675	4	0.09	30.9
28	3	0.0675	4	0.09	32.9
30	3	0.0675	4	0.09	34.9
32	3	0.0675	4	0.09	36.9
34	3	0.09	4	0.09	38.9
36	4	0.09	4	0.09	40.9
38	4	0.09	4	0.09	42.9
40	4	0.09	4	0.09	44.9
42	4	0.09	4	0.09	46.9
44	4	0.09	4	0.09	48.9
46	4	0.09	4	0.09	50.9
48	4	0.09	4	0.09	52.9
54	4	0.09	5	0.1125	59.0
60	4	0.09	6	0.135	65.0
66	4	0.09	8	0.18	71.1
70	5	0.1125	9	0.2025	75.3
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Straight Duct

4" ϕ - 48" ϕ L = 20'-0"
 52" ϕ - 72" ϕ L = 10'-0"



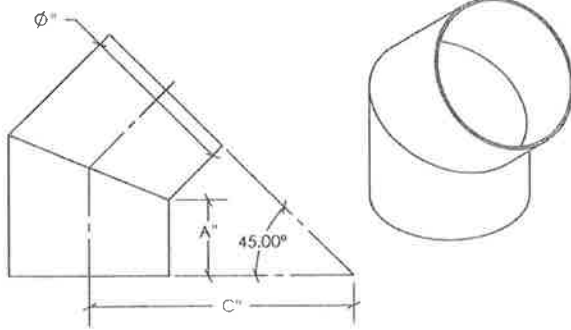
End Cap



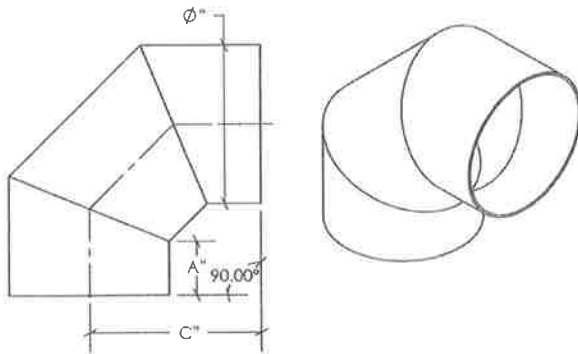
<p>PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF SPUNSTRAND INC. AND ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF SPUNSTRAND INC. IS PROHIBITED.</p>			DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL \pm ANGULAR: MACH \pm BEND \pm TWO PLACE DECIMAL \pm THREE PLACE DECIMAL \pm	NAME CJS DATE 2009	Spunstrand Inc.	
			MATERIAL	CHECKED		<h2>Duct</h2>
			FINISH	ENG APPR.		
				MFG APPR.		
				Q.A.		
			COMMENTS:			
	NEXT ASSY	USED ON			SIZE A DWG. NO. Underlab FRP REV.	
	APPLICATION		DO NOT SCALE DRAWING			

**72" and larger diameter ductwork is not included in ICC-ES listing.*

45° Elbows



90° Elbows



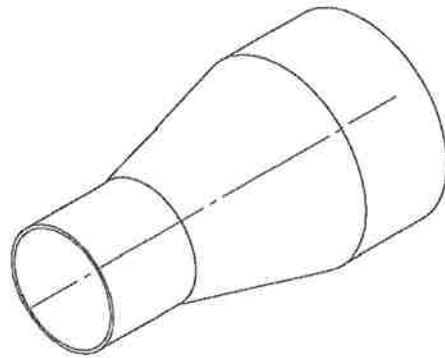
Diameter (in)	90° Elbows		45° Elbows
	A (in)	C (in)	C (in)
4	6	12 3/8	16 5/8
5	6	12 7/8	17 1/8
6	6	13 3/8	17 5/8
7	6	13 7/8	18 1/8
8	6	14 3/8	18 5/8
9	6	14 7/8	19 1/8
10	6	15 3/8	19 5/8
12	6	16 3/8	20 5/8
14	6	17 3/8	21 5/8
16	6	18 3/8	22 5/8
18	6	19 3/8	23 5/8
20	6	20 3/8	24 5/8
22	6	21 3/8	25 5/8
24	6	22 3/8	26 5/8
26	6	23 3/8	27 5/8
28	6	24 3/8	28 5/8
30	6	25 3/8	29 5/8
32	6	26 3/8	30 5/8
34	6	27 3/8	31 5/8
36	6	28 3/8	32 5/8
38	6	29 3/8	33 5/8
40	6	30 3/8	34 5/8
42	6	31 3/8	35 5/8
44	6	32 3/8	36 5/8
48	6	34 3/8	38 5/8
52	6	36 3/8	40 5/8
54	6	37 3/8	41 5/8
60	6	40 3/8	44 5/8
72	6	46 3/8	50 5/8

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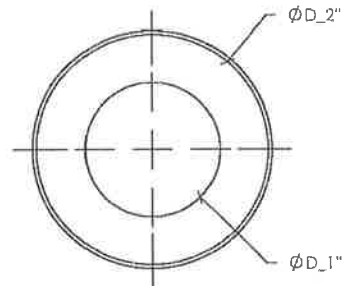
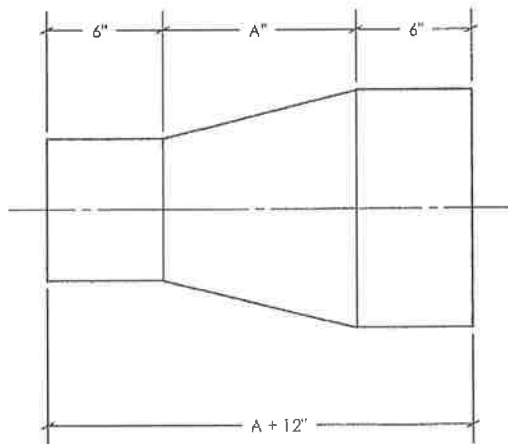
		DIMENSIONS ARE IN INCHES		NAME	DATE	Spunstrand Inc.
		TOLERANCES:		C.J.S.	2009	
		FRACTIONAL ±		CHECKED		Elbows
		ANGULAR: MACH ± BEND ±		ENG APPR.		
		TWO PLACE DECIMAL ±		MFG APPR.		
		THREE PLACE DECIMAL ±		Q.A.		
		MATERIAL		COMMENTS:		SIZE A DWG. NO. Underlab FRP REV.
NEXT ASSY	USED ON	FINISH				
APPLICATION		DO NOT SCALE DRAWING				

***72" and larger diameter ductwork is not included in ICC-ES listing.**

Inches of Reduction	A
1"	2 1/8"
2"	4
3"	5 7/8"
4"	7 3/4"
5"	9 5/8"
6"	11 1/2"
7"	13 3/8"
8"	15 1/8"
9"	17"
10"	18 7/8"
11"	20 3/4"
12"	22 5/8"
13"	24 1/2"
14"	26 3/8"
15"	28 5/8"
16"	32"
17"	33 7/8"
18"	35 3/4"
19"	36 5/8"
20"	37 5/8"



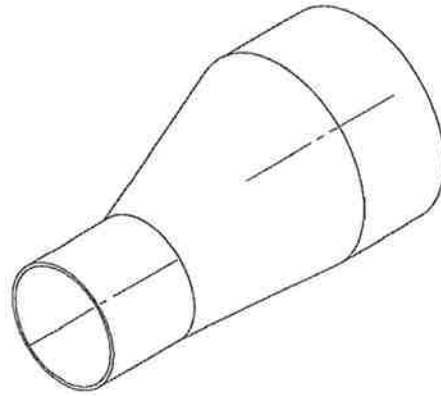
Inches of Reduction = $D_2 - D_1$



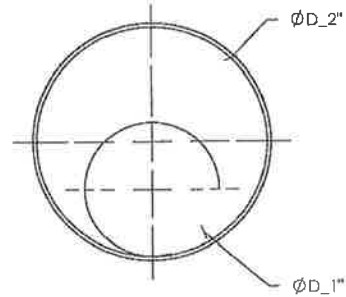
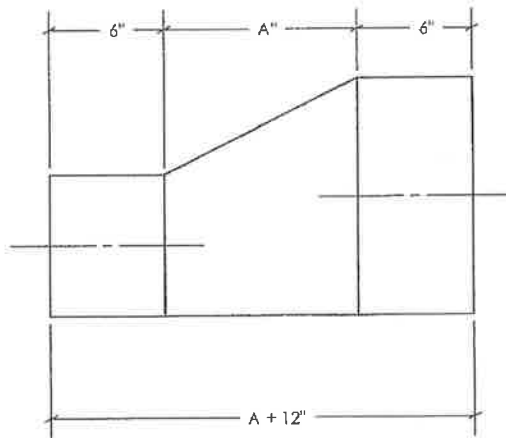
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		DIMENSIONS ARE IN INCHES		NAME	DATE	<i>Spunstrand Inc.</i>
		TOLERANCES:		CJS	2009	
		FRACTIONAL \pm		CHECKED		Concentric Reducer
		ANGULAR: MATCH \pm BEND \pm		ENG APPR.		
		TWO PLACE DECIMAL \pm		MFG APPR.		
		THREE PLACE DECIMAL \pm		Q.A.		
		MATERIAL		COMMENTS:		SIZE A
NEXT ASSY	USED ON	FINISH				
APPLICATION		DO NOT SCALE DRAWING				DWG. NO. Underslab FRP
						REV.

Inches of Reduction	A
1"	4 1/4"
2"	8"
3"	11 3/4"
4"	15 1/2"
5"	19 1/4"
6"	23"
7"	26 3/4"
8"	30 1/4"
9"	34"
10"	37 3/4"
11"	41 1/2"
12"	45 1/4"
13"	49"
14"	52 3/4"
15"	57 1/4"
16"	64"
17"	67 3/4"
18"	69 1/4"
19"	71 1/2"
20"	75 1/4"

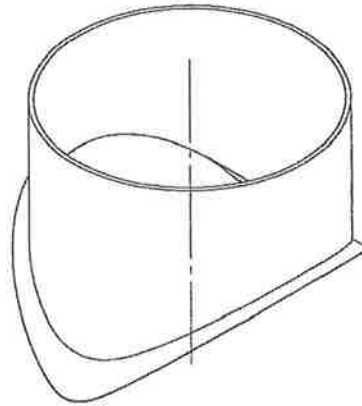
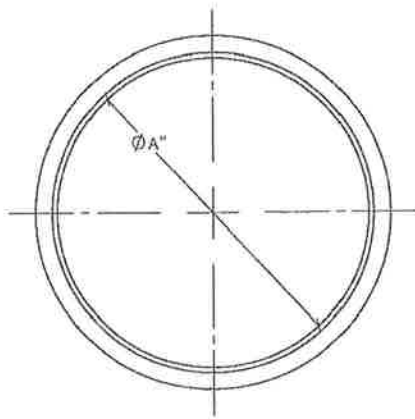


Inches of Reduction = $D_2 - D_1$

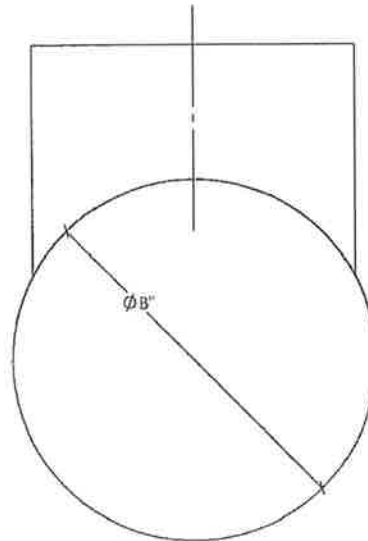
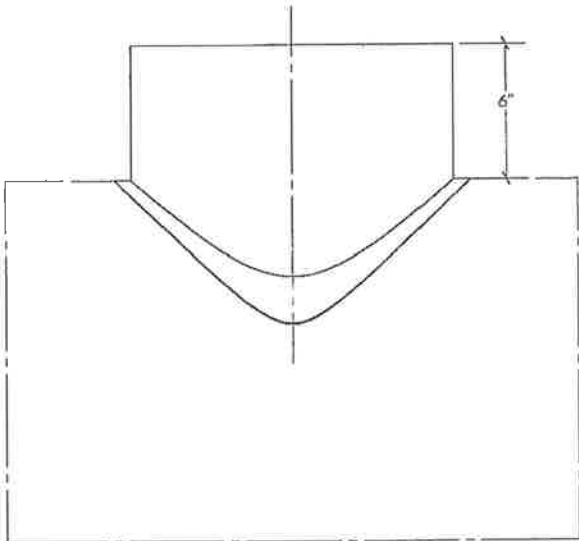


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		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±		NAME	DATE	<i>Spunstrand Inc.</i>
		MATERIAL		CJS	2009	
NEXT ASSY		USED ON	FINISH	CHECKED		Eccentric Reducer
APPLICATION		DO NOT SCALE DRAWING		ENG APPR.		
				MFG APPR.		DWG. NO. Underlab FRP
				Q.A.		
				COMMENTS:		REV.
						A



A onto B



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		DIMENSIONS ARE IN INCHES
		TOLERANCES:
		FRACTIONAL: ±
		ANGULAR: MACH ± BEND ±
		TWO PLACE DECIMAL ±
		THREE PLACE DECIMAL ±
		MATERIAL
		FINISH
NEXT ASSY	USED ON	
APPLICATION	DO NOT SCALE DRAWING	

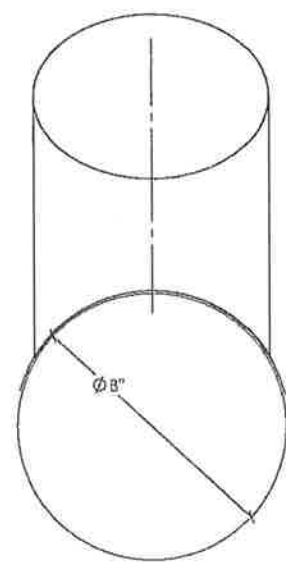
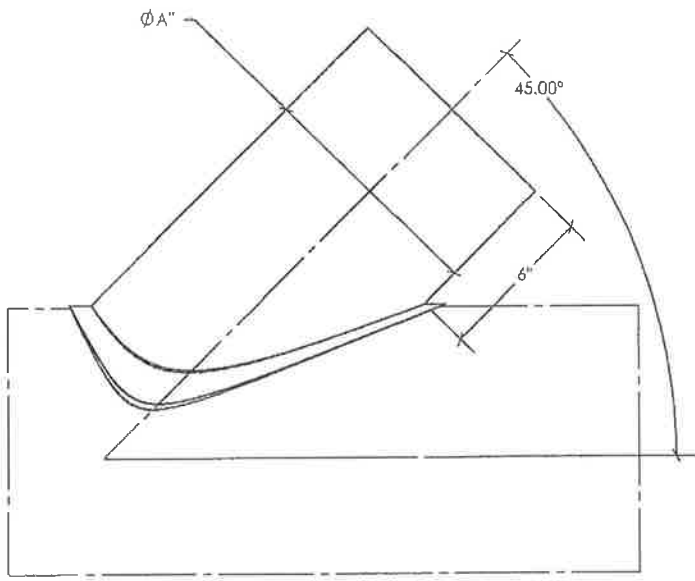
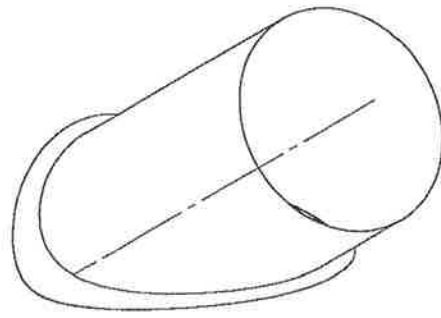
NAME	DATE
DRAWN CJS	2009
CHECKED	
ENG APPR.	
MFG APPR.	
Q.A.	
COMMENTS:	

Spunstrand Inc.

90deg Saddle Tap

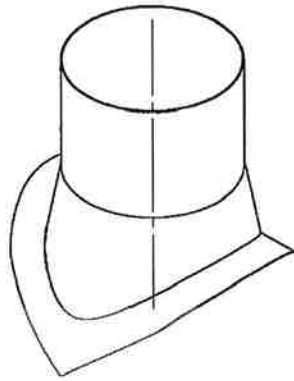
SIZE **A** DWG. NO. **Underslab FRP** REV.

A onto B

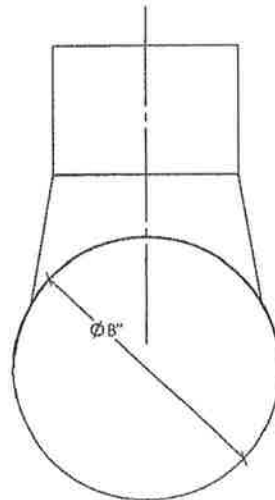
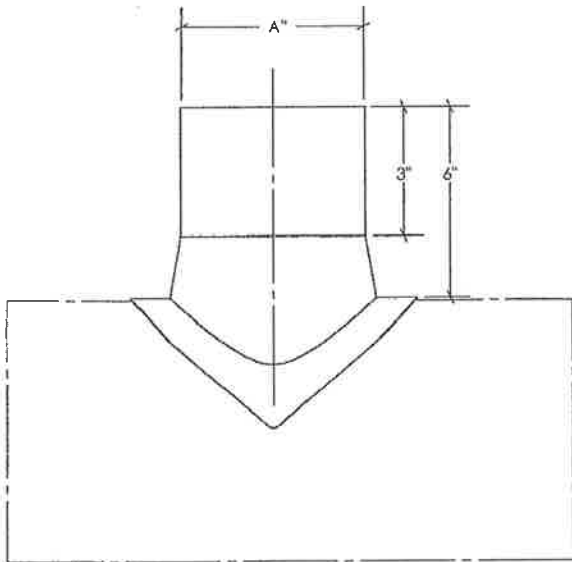


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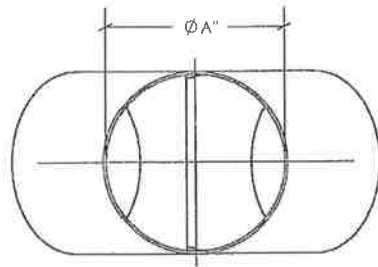
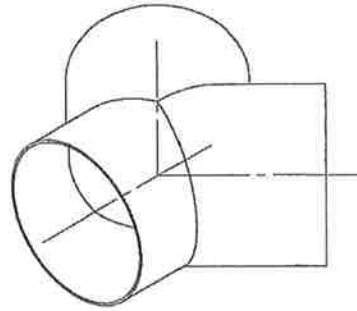
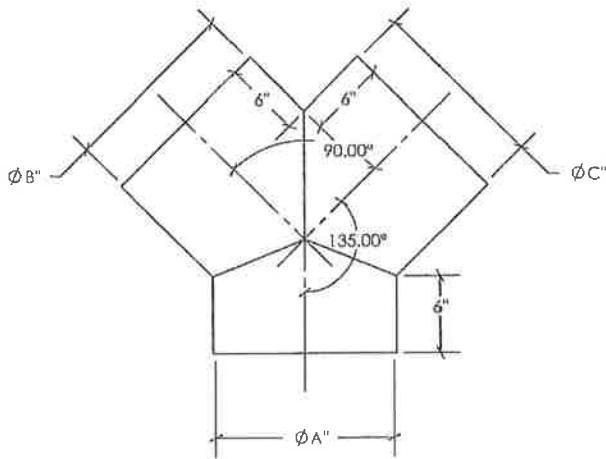
		DIMENSIONS ARE IN INCHES		NAME	DATE	<i>Spunstrand Inc.</i>
		TOLERANCES:		CJS	2009	
		FRACTIONAL ±		CHECKED		45deg Saddle Tap
		ANGULAR: MACH ± BEND ±		EHG APPR.		
		TWO PLACE DECIMAL ±		MFG APPR.		
		THREE PLACE DECIMAL ±		Q.A.		
		MATERIAL		COMMENTS:		SIZE A DWG. NO. Underslab FRP REV.
NEXT ASSY	USED ON	FINISH				
APPLICATION		DO NOT SCALE DRAWING				



A onto B

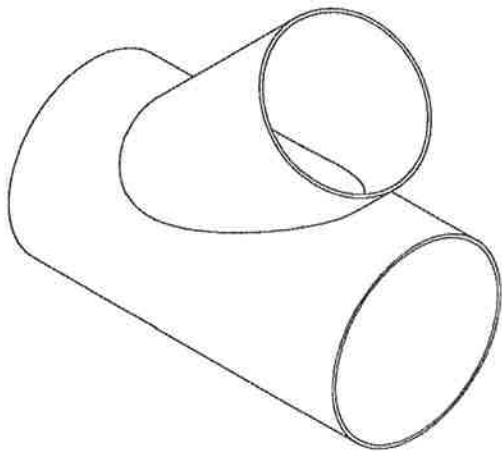


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		MATERIAL		CHECKED	ENG APPR.	
		FINISH		COMMENTS:		
		NEXT ASSY	USED ON	Q.A.		
APPLICATION		DO NOT SCALE DRAWING		DWG. NO.	Underlab FRP	REV.



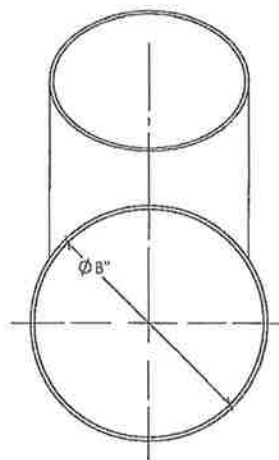
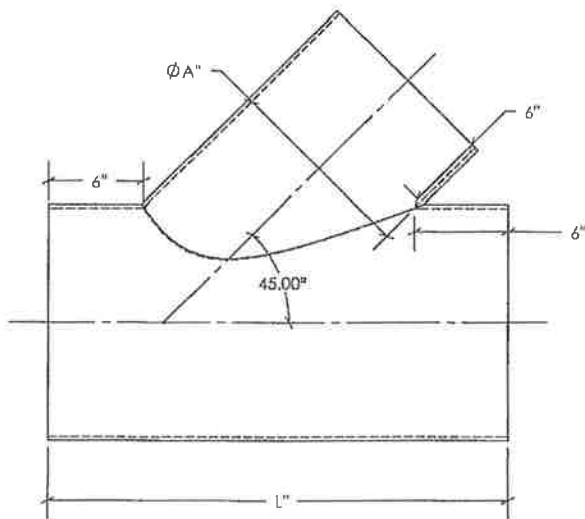
A x B x C

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				DRAWN	CJS		2009
				CHECKED			
				ENG APPR.			
				MFG APPR.			
		MATERIAL	Q.A.				
		FRISH	COMMENTS:				
	NEXT ASSY	USED ON					
	APPLICATION	DO NOT SCALE DRAWING					
			SIZE	DWG. NO.	REV.		
			A	Underslab FRP			



45 DEGREE LATERAL	
"A" DIAMETER	L
4	17 2/3
5	19
6	20 1/2
7	21 8/9
8	23 1/3
9	24 3/4
10	26 1/7
12	29
14	31 7/8
16	34 5/8
18	37 1/2
20	40 1/4
22	43 1/8
24	46
26	48 3/4
28	51 5/8
30	54 1/2
32	57 1/4
34	60
36	63
38	65 3/4
40	68 5/8
42	71 1/4
44	74 1/4
48	79.872
52	85 1/2
54	88 3/8
60	96 7/8
72	113 7/8

A x B



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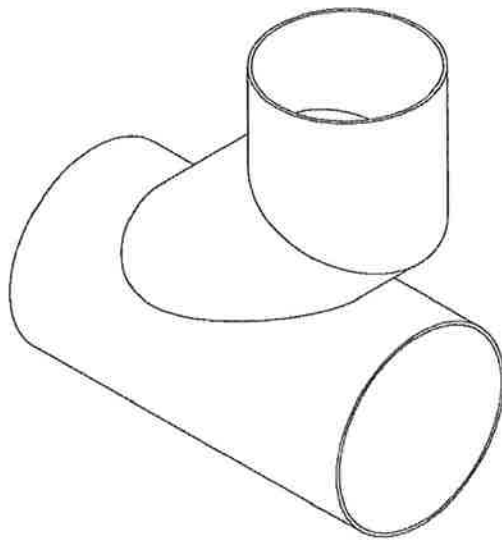
		DIMENSIONS ARE IN INCHES		NAME	DATE	
		TOLERANCES:		DRAWN	CJS	2009
		FRACTIONAL ±		CHECKED		
		ANGULAR: MACH ± BEND ±		ENG APPR.		
		TWO PLACE DECIMAL ±		MFG APPR.		
		THREE PLACE DECIMAL ±		Q.A.		
		MATERIAL		COMMENTS:		
NEXT ASSY	USED ON	FINISH				
APPLICATION		DO NOT SCALE DRAWING				

Spunstrand Inc.

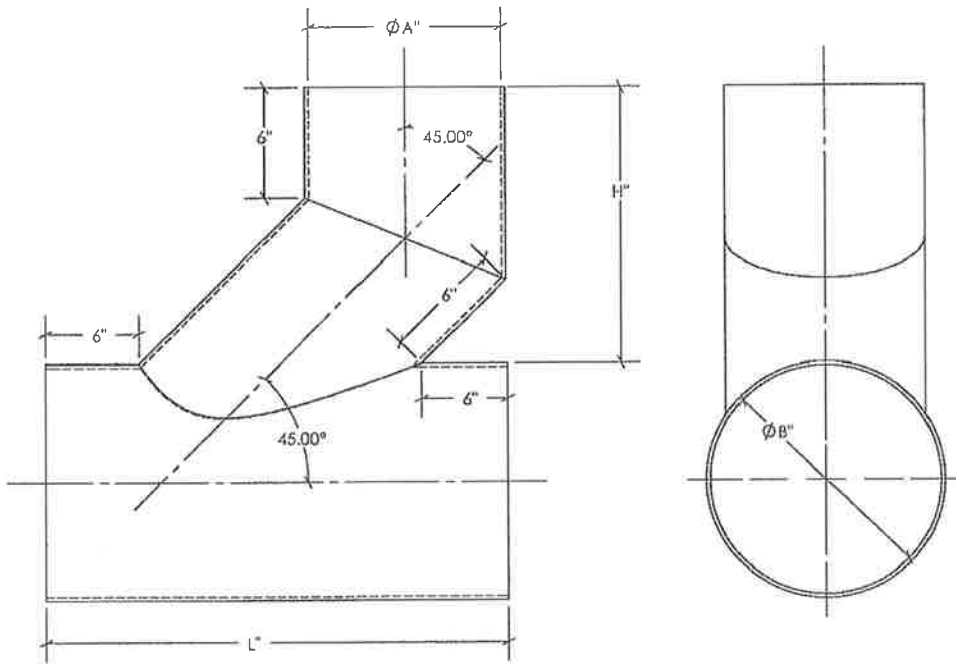
45deg Lateral

SIZE	DWG. NO.	Underslab FRP	REV.
A			

*72" and larger diameter ductwork is not included in ICC-ES listing.



90 DEGREE LATERAL		
"A" DIAMETER	L	H
4	17 2/3	12
5	19	12 1/3
6	20 1/2	12 3/4
7	21 8/9	13 1/7
8	23 1/3	13 4/7
9	24 3/4	14
10	26 1/7	14 2/5
12	29	15 2/9
14	31 7/8	16
16	34 5/8	16 7/8
18	37 1/2	17 5/7
20	40 1/4	18 1/2
22	43 1/8	19 1/3
24	46	20 1/5
26	48 3/4	21
28	51 5/8	21 6/7
30	54 1/2	22 2/3
32	57 1/4	23 1/2
34	60	24 1/3
36	63	25 1/6
38	65 3/4	26
40	68 5/8	26 5/6
42	71 1/4	27 2/3
44	74 1/4	28 1/2
48	79.872	30 1/8
52	85 1/2	31 4/5
54	88 3/8	32 5/8
60	96 7/8	35 1/9
72	113 7/8	40



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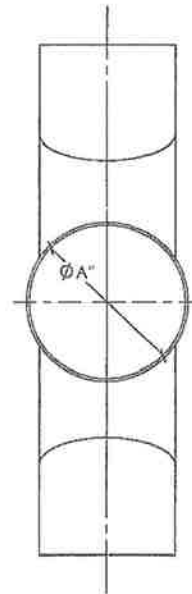
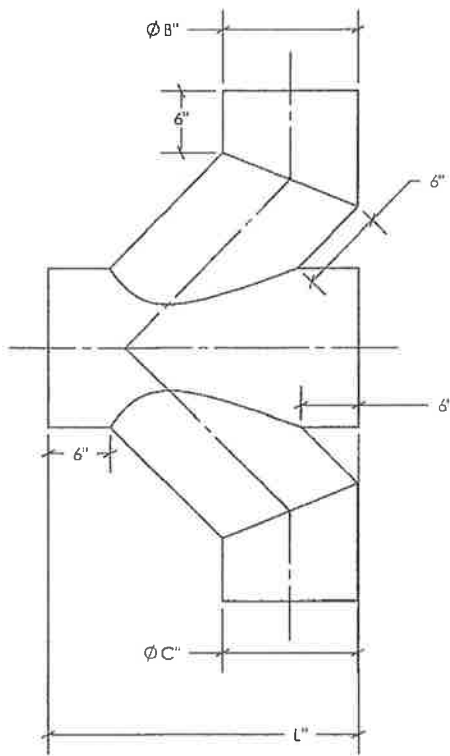
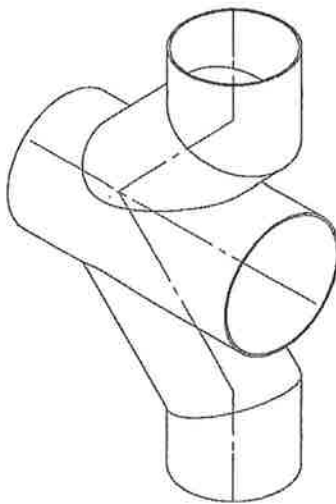
		DIMENSIONS ARE IN INCHES	NAME	DATE	
		TOLERANCES:	DRAWN	CJS	2009
		FRACTIONAL \pm	CHECKED		
		ANGULAR: MACHS: BEND \pm	ENG APPR.		
		TWO PLACE DECIMAL \pm	MFG APPR.		
		THREE PLACE DECIMAL \pm	Q.A.		
		MATERIAL	COMMENTS:		
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

Spunstrand Inc.

90deg Lateral

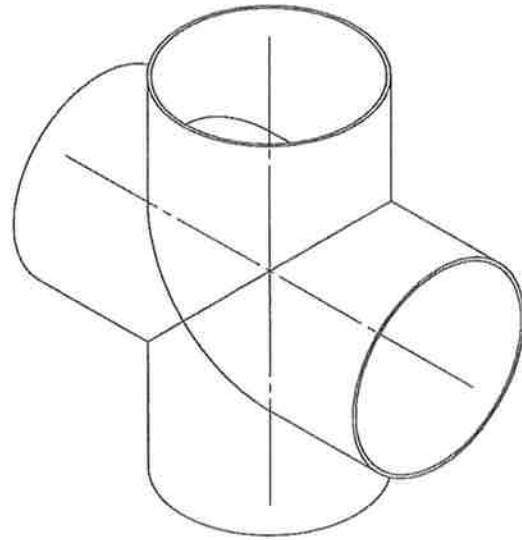
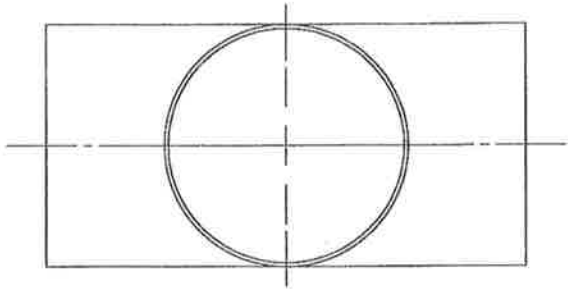
SIZE **A** DWG. NO. Underslab FRP REV.

**72" and larger diameter ductwork is not included in ICC-ES listing.*



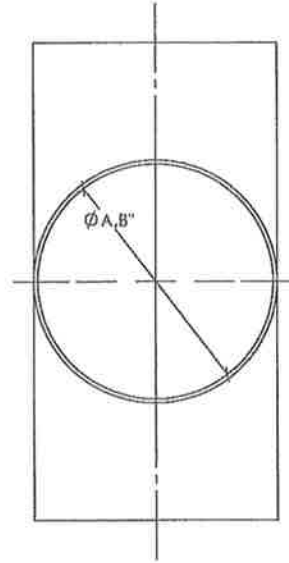
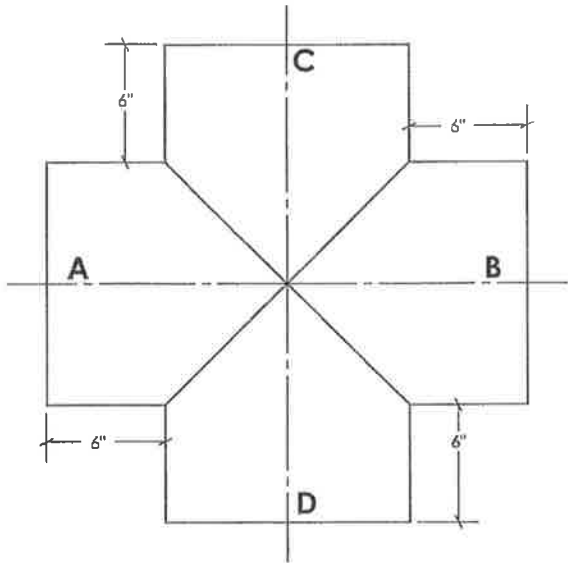
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		DIMENSIONS ARE IN INCHES		NAME	DATE	<i>Spunstrand Inc.</i>
		TOLERANCES:		CJS	2009	
		FRACTIONAL \pm		CHECKED		Double 90deg Lateral
		ANGULAR: MACH \pm BEND \pm		ENG APPR.		
		TWO PLACE DECIMAL \pm		MFG APPR.		
		THREE PLACE DECIMAL \pm		Q.A.		SIZE A DWG. NO. Underslab FRP REV.
		MATERIAL		COMMENTS:		
NEXT ASSY	USED ON	FINISH				
APPLICATION		DO NOT SCALE DRAWING				



A x B x C x D

A & B must be equal diameter (Primary Air Flow)
 C diameter must be equal to or less than A,B
 D diameter must be equal to or less than A,B



Reducing Crosses Available by Request

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		DIMENSIONS ARE IN INCHES
		TOLERANCES:
		FRACTIONAL ±
		ANGULAR: MACH ± BEND ±
		TWO PLACE DECIMAL ±
		THREE PLACE DECIMAL ±
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN	CJS	2009
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

<i>Spunstrand Inc.</i>		
Cross		
SIZE	DWG. NO.	REV.
A	Underslab FRP	

