

DIMENSIONAL DATA

R-10 COMMERCIAL



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

R-10 (Insulated) Duct and Fittings – Shipping Weights

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
NOMINAL DIAM. (IN)	STRAIGHT DUCT / FT (lbs)	45° ELBOW (lbs)	90° ELBOW (lbs)	CON. RED. (lbs)	ECC. RED. (lbs)	END CAP (lbs)	TEE (lbs)	SINGLE 45° Y (lbs)	SINGLE 90° Y (lbs)	CROSS (lbs)	DOUBLE 45° Y (lbs)	DOUBLE 90° Y (lbs)	TRUE Y (lbs)	SADDLE TAP (lbs)	TRANSITO N (lbs)	FLANGE (lbs)
4	3	3	7	2	4	3	3	3	7	3	7	13	3	2	10	3
5	3	3	7	3	5	3	7	7	10	10	10	16	3	2	11	3
6	4	3	7	5	7	3	7	10	13	10	13	20	7	2	13	5
7	4	5	8	7	8	5	7	11	15	11	15	21	7	3	16	5
8	5	7	11	7	8	5	10	13	18	13	18	24	8	3	18	7
9	5	7	13	8	11	5	13	16	24	16	24	37	8	3	20	7
10	6	8	15	8	11	8	15	20	28	18	28	41	11	7	23	8
12	7	11	20	8	11	8	21	26	34	26	34	54	11	7	26	10
14	8	15	26	11	15	10	28	37	46	33	47	63	18	7	31	10
16	9	16	28	13	16	11	29	39	47	36	49	65	20	8	31	10
18	10	20	36	13	18	13	36	50	55	42	60	72	26	8	34	11
20	11	26	46	16	21	18	44	62	76	50	80	91	37	13	42	15
22	12	31	52	21	28	20	50	68	85	59	93	115	41	13	68	23
24	18	37	68	24	33	24	73	106	122	89	130	163	57	18	80	26
26	20	44	78	29	37	24	78	122	146	98	154	187	65	18	86	29
28	21	46	85	33	42	26	85	154	179	106	203	219	78	18	93	31
30	23	52	89	34	44	28	98	171	211	114	211	276	88	20	99	34
32	24	57	128	36	47	29	107	182	231	124	231	297	99	21	107	36
34	27	68	130	38	50	32	132	398	247	152	271	338	115	23	114	38
36	31	80	132	41	54	34	156	247	263	180	312	379	132	24	120	41
38	33	84	145	44	60	39	163	258	281	189	323	408	153	24	125	42
40	35	88	141	47	67	42	169	270	299	197	336	437	174	26	130	44
42	36	96	171	52	67	44	184	293	346	218	361	496	218	26	138	46
44	41	101	180	54	70	41	190	298	353	223	371	504	232	28	143	47
46	43	106	190	57	73	42	197	304	359	229	380	512	245	29	148	49
48	41	117	203	59	76	39	208	315	367	241	400	528	267	29	153	52
54	51	153	276	73	96	50	315	468	535	361	592	749	354	36	163	55
60	63	184	341	81	106	65	400	618	731	455	780	990	390	46	174	59
66	84	284	532	120	156	76	613	980	1141	691	1233	1549	746	55	247	83
70	98	351	659	146	189	84	756	1220	1414	848	1536	1921	983	62	133	99
*72	106	385	723	159	206	89	827	1342	1550	930	1688	2108	1102	63	323	109

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

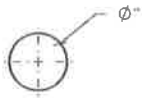
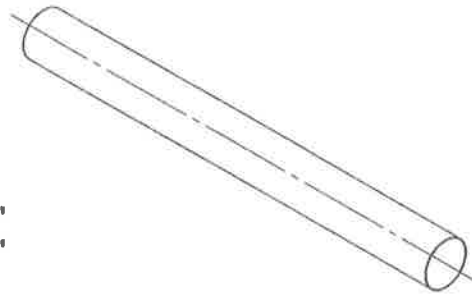
OUTSIDE DIAMETER FOR R-10² DUCT
Tolerance +/- 1/4"

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	7.8
5	2	0.045	3	0.0675	8.8
6	2	0.045	3	0.0675	9.8
7	2	0.045	3	0.0675	10.8
8	2	0.045	3	0.0675	11.8
9	2	0.045	3	0.0675	12.8
10	2	0.045	3	0.0675	13.8
12	2	0.045	3	0.0675	15.8
14	2	0.045	3	0.0675	17.8
16	2	0.045	3	0.0675	19.8
18	2	0.045	3	0.0675	21.8
20	2	0.045	3	0.0675	23.8
22	2	0.045	3	0.0675	25.8
24	3	0.0675	4	0.09	27.9
26	3	0.0675	4	0.09	29.9
28	3	0.0675	4	0.09	31.9
30	3	0.0675	4	0.09	33.9
32	3	0.0675	4	0.09	35.9
34	3	0.09	4	0.09	38.0
36	4	0.09	4	0.09	40.0
38	4	0.09	4	0.09	42.0
40	4	0.09	4	0.09	44.0
42	4	0.09	4	0.09	46.0
44	4	0.09	4	0.09	48.0
46	4	0.09	4	0.09	50.0
48	4	0.09	4	0.09	52.0
54	4	0.09	5	0.1125	58.0
60	4	0.09	6	0.135	64.1
66	4	0.09	8	0.18	70.2
70	5	0.1125	9	0.2025	74.3

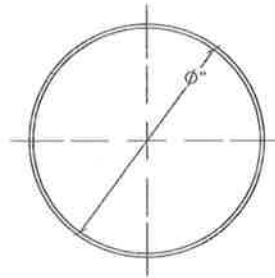
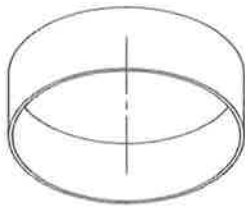
***72" and larger diameter ductwork is not included in the ICC-ES listing.**

Straight Duct

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



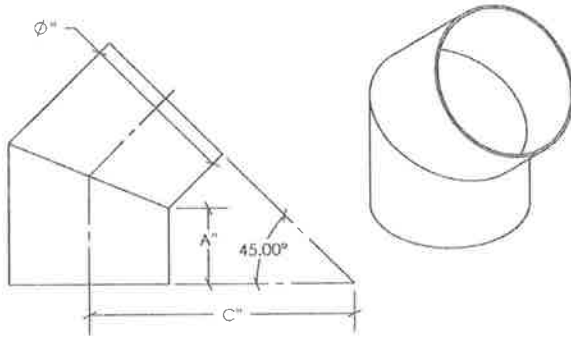
End Cap



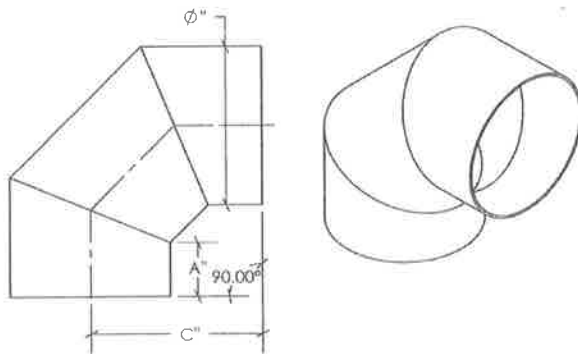
<p>PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF SPUNSTRAND INC. AND ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF SPUNSTRAND INC. IS PROHIBITED.</p>			DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL \pm ANGULAR: MACH \pm BEND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

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

45° Elbows



90° Elbows

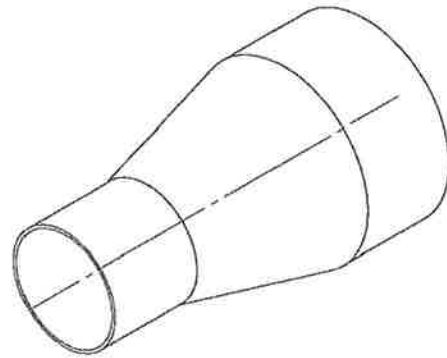


Diameter (in)	90° Elbows		45° Elbows
	A (in)	C (in)	C (in)
4	6	12 3/8	16 5/8
5	6	12 7/8	17 1/8
6	6	13 3/8	17 5/8
7	6	13 7/8	18 1/8
8	6	14 3/8	18 5/8
9	6	14 7/8	19 1/8
10	6	15 3/8	19 5/8
12	6	16 3/8	20 5/8
14	6	17 3/8	21 5/8
16	6	18 3/8	22 5/8
18	6	19 3/8	23 5/8
20	6	20 3/8	24 5/8
22	6	21 3/8	25 5/8
24	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

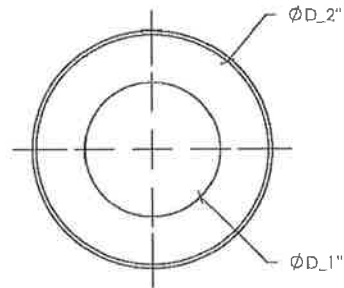
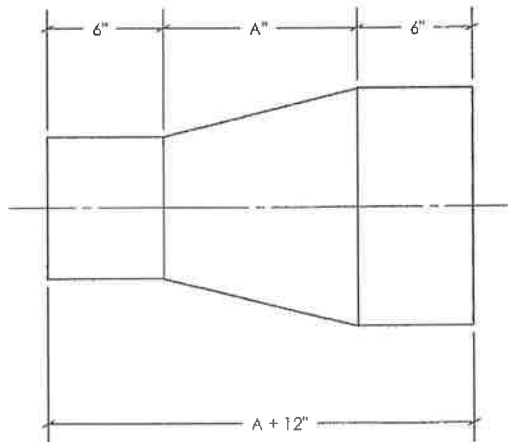
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			MATERIAL:	CHECKED:	
	NEXT ASSY	USED ON	FINISH	ENG APPR: MFG APPR: Q.A.:	
	APPLICATION			COMMENTS:	
	DO NOT SCALE DRAWING			SIZE: A DWG. NO.: Understab FRP REV.	

**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 TOLERANCES: FRACTIONAL \pm ANGULAR: MACH \pm BEND \pm TWO PLACE DECIMAL \pm THREE PLACE DECIMAL \pm			
		MATERIAL			
		FINISH			
NEXT ASSY	USED ON				
APPLICATION		DO NOT SCALE DRAWING			

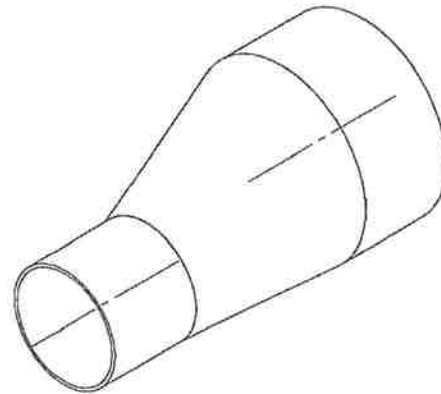
	NAME	DATE
DRAWN	CJS	2009
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS		

Spunstrand Inc.

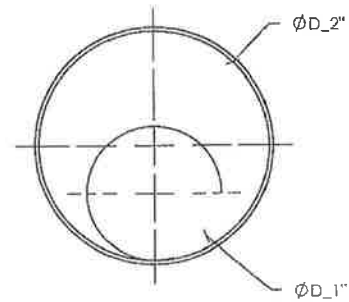
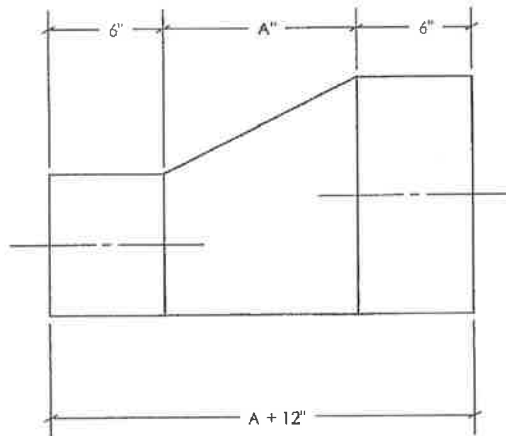
Concentric Reducer

SIZE	DWG. NO.	REV
A	Underslab FRP	

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"

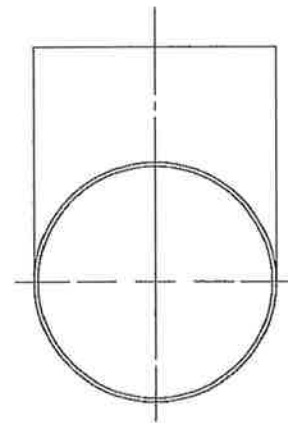
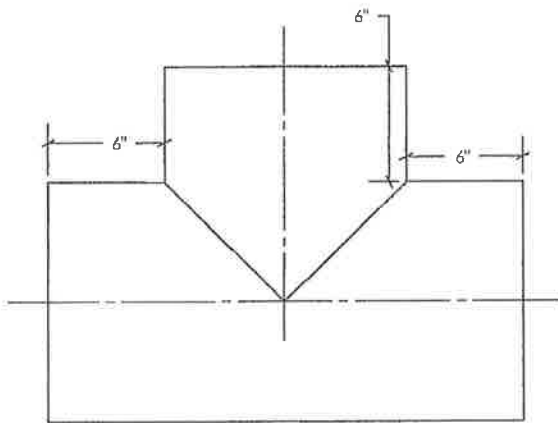
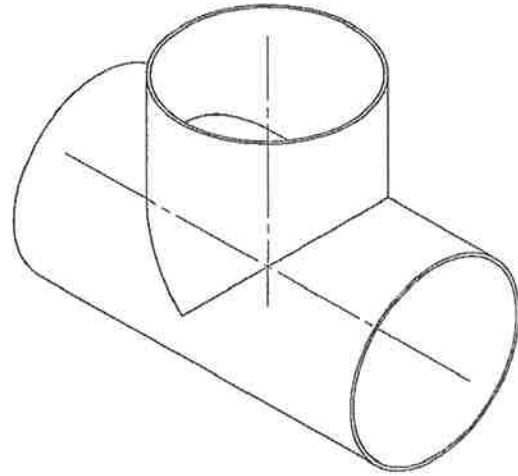
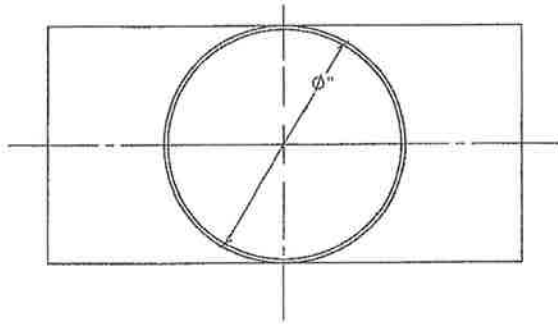


Inches of Reduction = $D_2 - D_1$



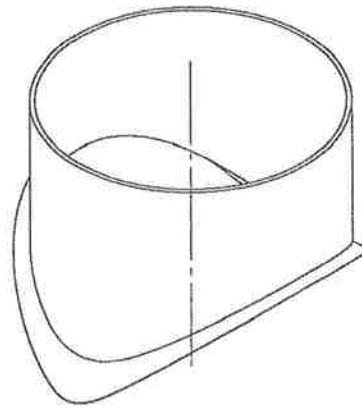
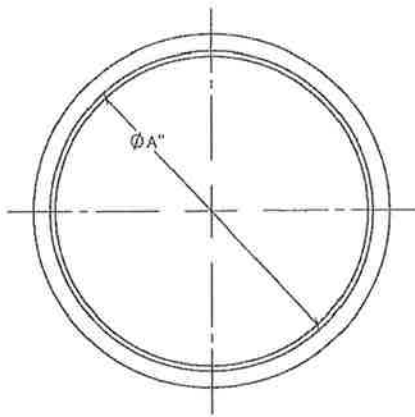
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		DIMENSIONS ARE IN INCHES		NAME		DATE		<i>Spunstrand Inc.</i>	
		TOLERANCES:		DRAWN		CJS			
		FRACTIONAL ±		CHECKED				Eccentric Reducer	
		ANGULAR: MACH ± BEND ±		ENG APPR.					
		TWO PLACE DECIMAL ±		MFG APPR.					
		THREE PLACE DECIMAL ±		Q.A.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

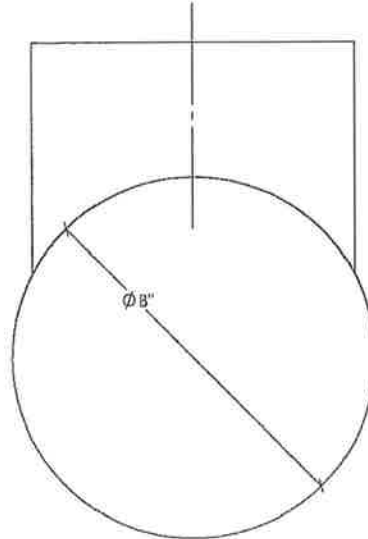
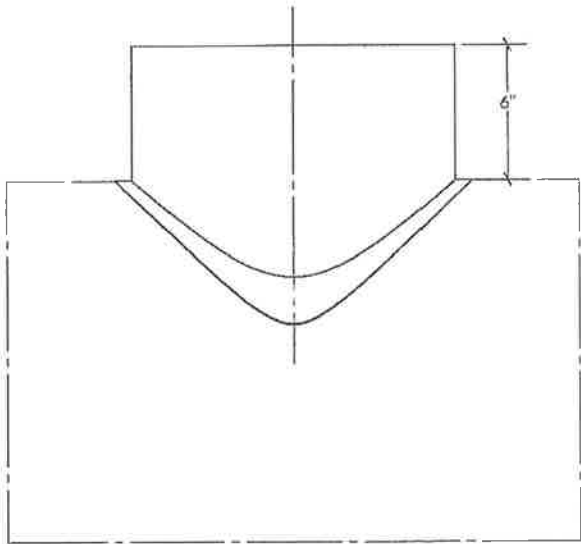


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		DIMENSIONS ARE IN INCHES		NAME	DATE	<i>Spunstrand Inc.</i>	
		TOLERANCES:		DRAWN	CJS		
		FRACTIONAL ±		CHECKED			TEE
		ANGULAR: MACH ± BEND ±		ENG APPR.			
		TWO PLACE DECIMAL ±		MFG APPR.			
		THREE PLACE DECIMAL ±		Q.A.			
		MATERIAL		COMMENTS: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



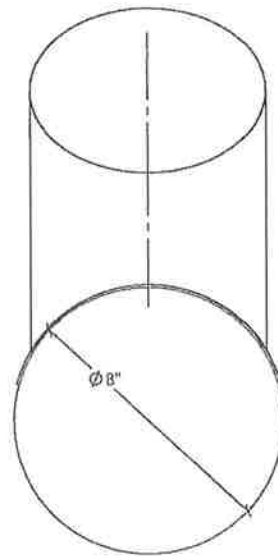
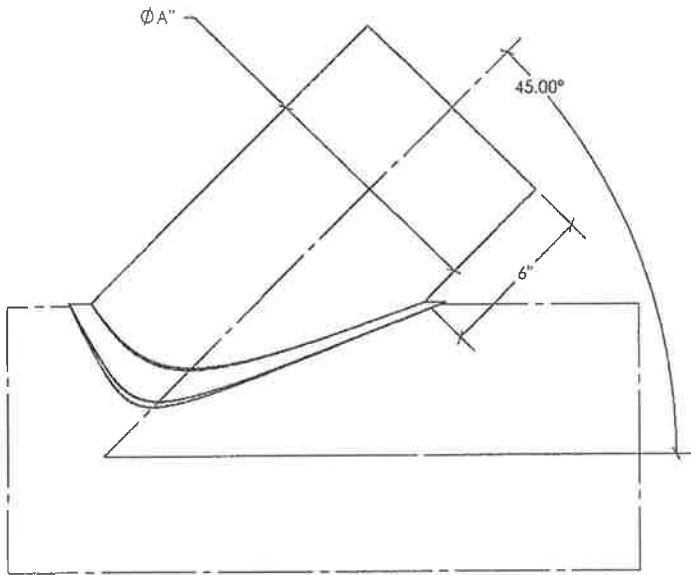
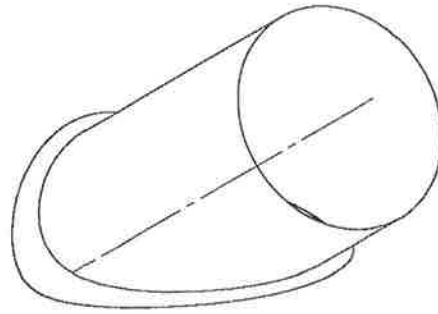
A onto B



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		TOLERANCES:		DRAWN	CJS			2009	
		FRACTIONAL ±		CHECKED			90deg Saddle Tap		
		ANGULAR: MACH ± BEND ±		ENG 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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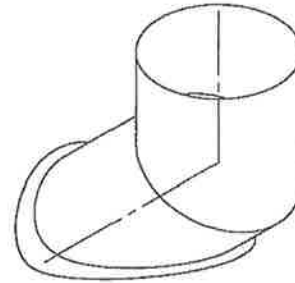
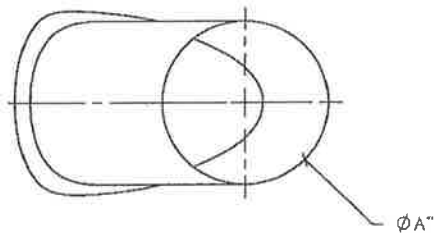
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		FRACTIONAL \pm
		ANGULAR: MACH \pm BEND \pm
		TWO PLACE DECIMAL \pm
		THREE PLACE DECIMAL \pm
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

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

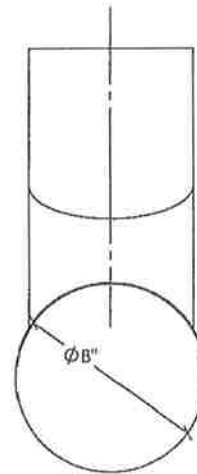
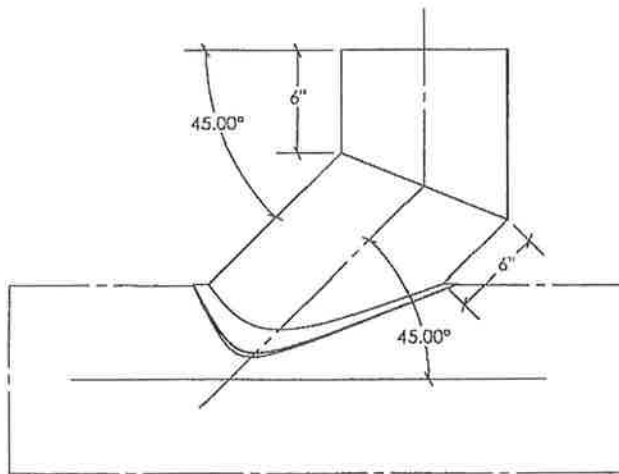
Spunstrand Inc.

45deg Saddle Tap

SIZE	DWG. NO.	Underlab FRP	REV.
A			



A onto B

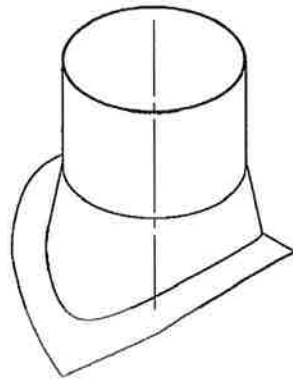


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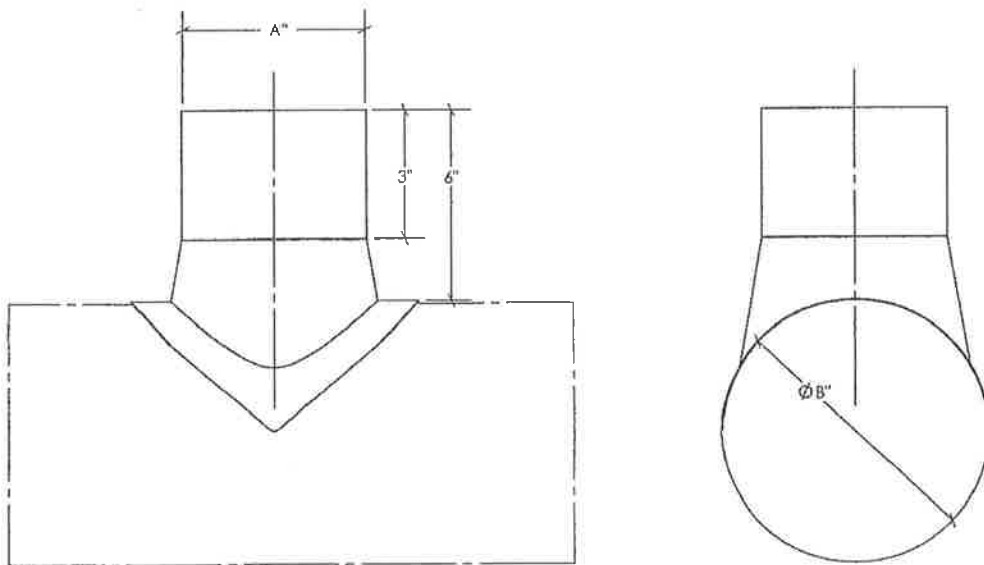
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		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

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

<i>Spunstrand Inc.</i>		
90deg Lateral Saddle Tap		
SIZE A	DWG. NO. Underslab FRP	REV.



A onto B



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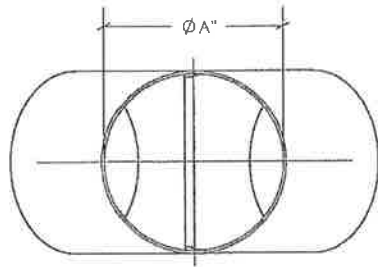
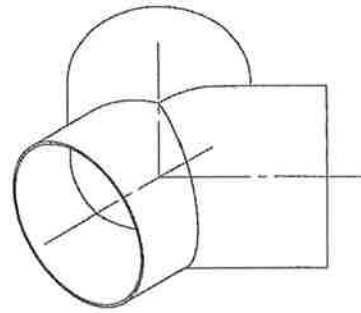
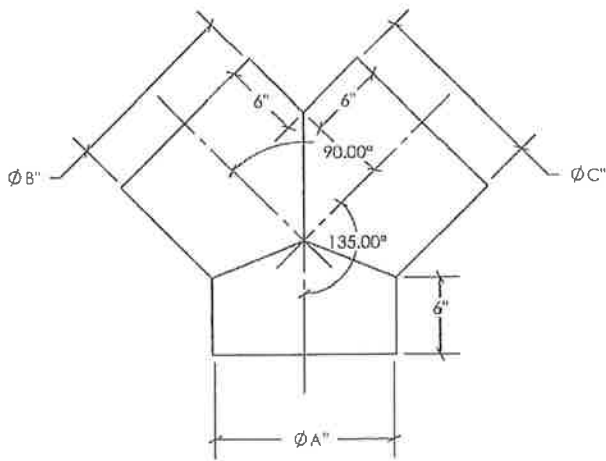
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		TOLERANCES:
		FRACTIONAL ±
		ANGULAR: MACH ± BEND ±
		TWO PLACE DECIMAL ±
		THREE PLACE DECIMAL ±
		MATERIAL
		FINISH
NEXT ASSY	USED ON	
APPLICATION		DO NOT SCALE DRAWING

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

Spunstrand Inc.

Conical Tap

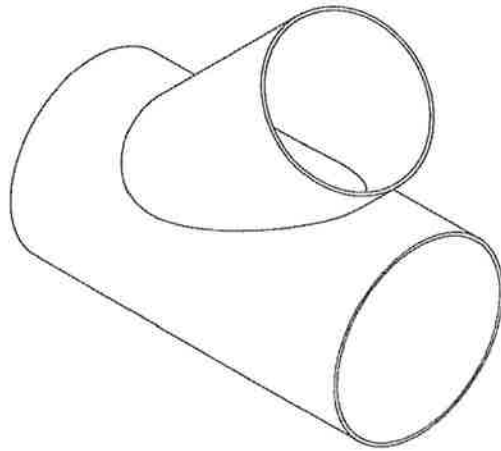
SHEET	DWG. NO.	Underlab FRP	REV.
A			



A x B x C

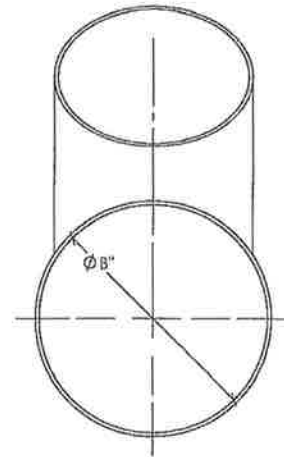
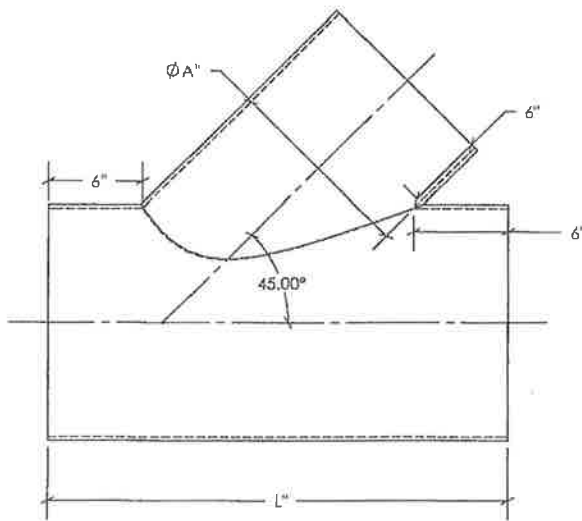
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			DIMENSIONS ARE IN INCHES	NAME	DATE	<i>Spunstrand Inc.</i>
			TOLERANCES:	DRAWN	CJS	
			FRACTIONAL ±	CHECKED		True Wye
			ANGULAR: MACH ± BEND ±	ENG APPR.		
			TWO PLACE DECIMAL ±	MFG APPR.		
			THREE PLACE DECIMAL ±	Q.A.		DWG. NO. Underslab FRP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



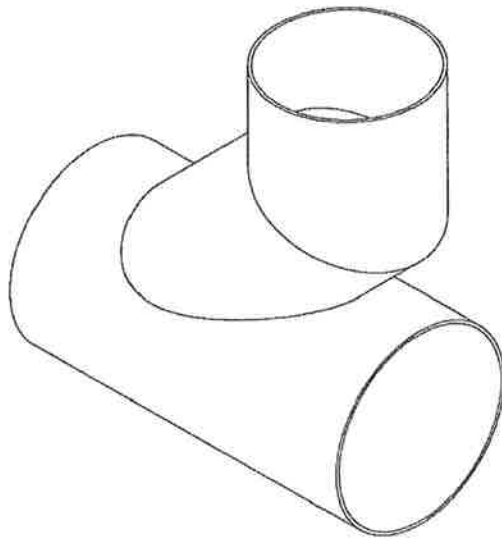
45 DEGREE LATERAL	
"A" DIAMETER	L
4	17 2/3
5	19
6	20 1/2
7	21 8/9
8	23 1/3
9	24 3/4
10	26 1/7
12	29
14	31 7/8
16	34 5/8
18	37 1/2
20	40 1/4
22	43 1/8
24	46
26	48 3/4
28	51 5/8
30	54 1/2
32	57 1/4
34	60
36	63
38	65 3/4
40	68 5/8
42	71 1/4
44	74 1/4
48	79.872
52	85 1/2
54	88 3/8
60	96 7/8
72	113 7/8

A x B

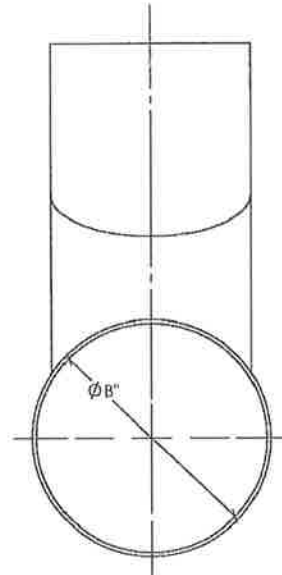
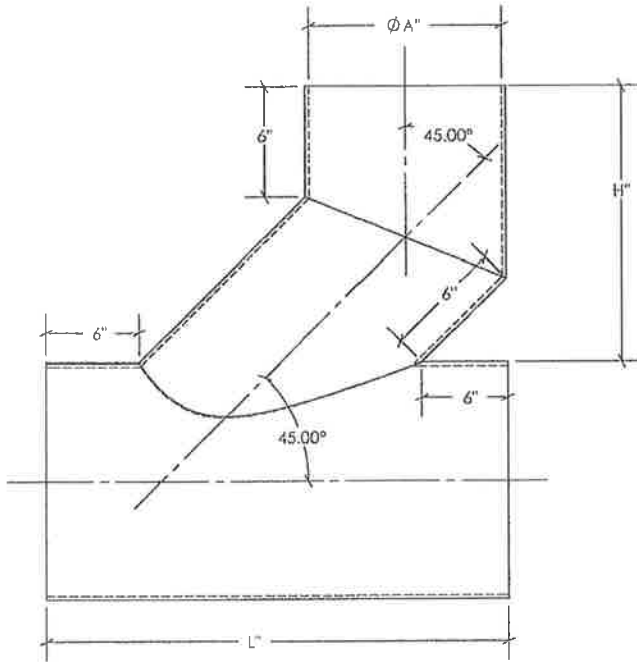


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			MATERIAL	DRAWN CHECKED ENG APPR. MFG APPR.				
			FINISH	G.A.				
			DO NOT SCALE DRAWING	COMMENTS:				
	NEXT ASSY	USED ON				SIZE A		
	APPLICATION					DWG. NO. Underlab FRP		
						REV.		

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



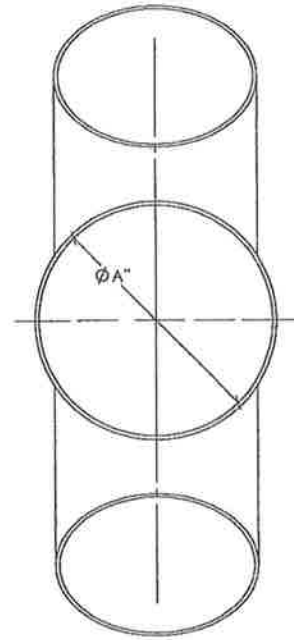
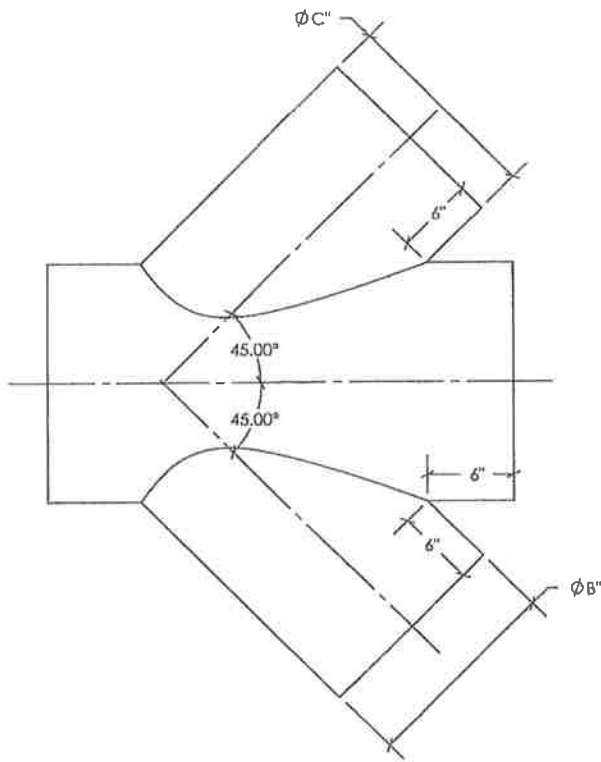
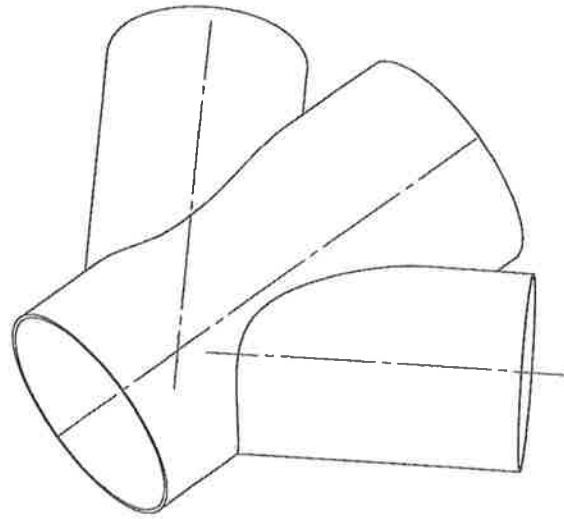
90 DEGREE LATERAL		
"A" DIAMETER	L	H
4	17 2/3	12
5	19	12 1/3
6	20 1/2	12 3/4
7	21 8/9	13 1/7
8	23 1/3	13 4/7
9	24 3/4	14
10	26 1/7	14 2/5
12	29	15 2/9
14	31 7/8	16
15	34 5/8	16 7/8
18	37 1/2	17 5/7
20	40 1/4	18 1/2
22	43 1/8	19 1/3
24	46	20 1/5
26	48 3/4	21
28	51 5/8	21 6/7
30	54 1/2	22 2/3
32	57 1/4	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 8/7	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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				DRAWN	CJS		2009
				CHECKED			
				ENG APPR.			
				MFG APPR.			
				Q.A.			
				COMMENTS:			
	NEXT ASSY	USED ON	RINSH				
	APPLICATION		DO NOT SCALE DRAWING				
						SIZE A DWG. NO. Underslab FRP REV.	

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

A x B x C



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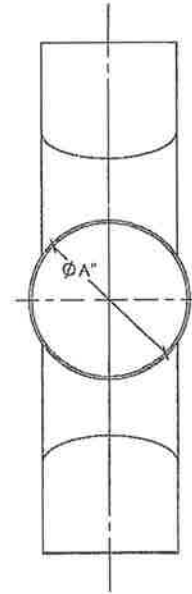
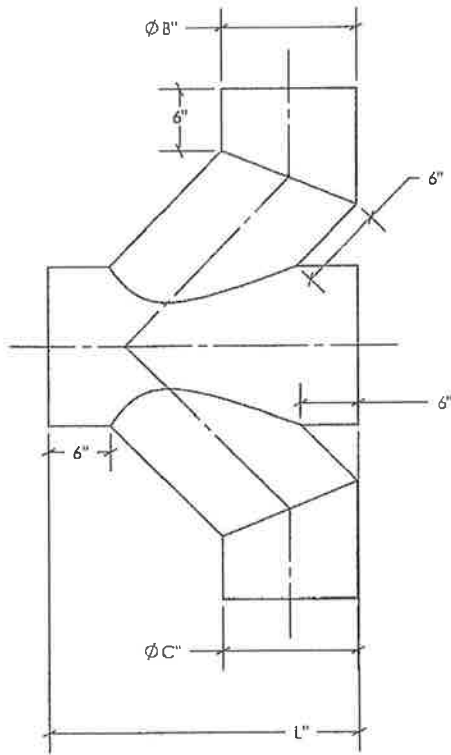
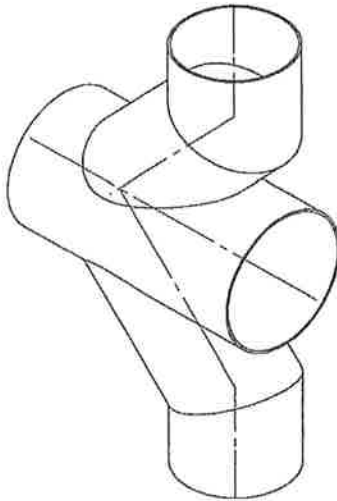
			DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±
			MATERIAL
			FINISH
			APPLICATION
			DO NOT SCALE DRAWING

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

Spunstrand Inc.

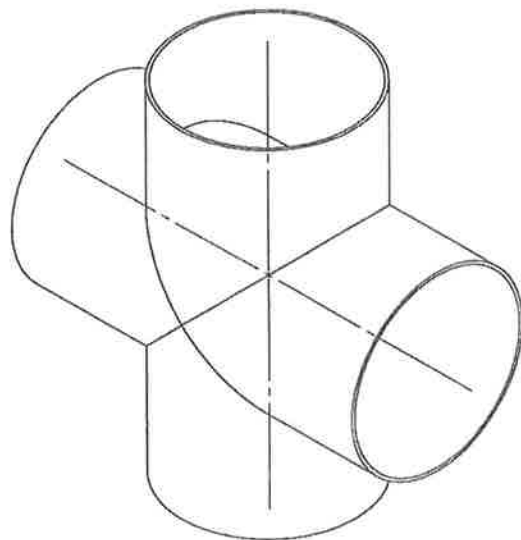
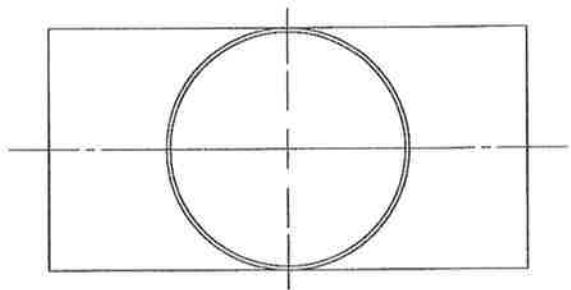
Double 45deg Lateral

SIZE	DWG. NO.	Underlab FRP	REV.
A			



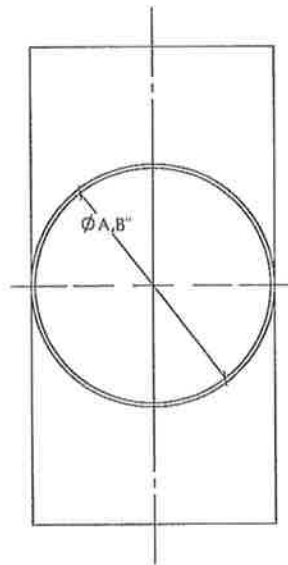
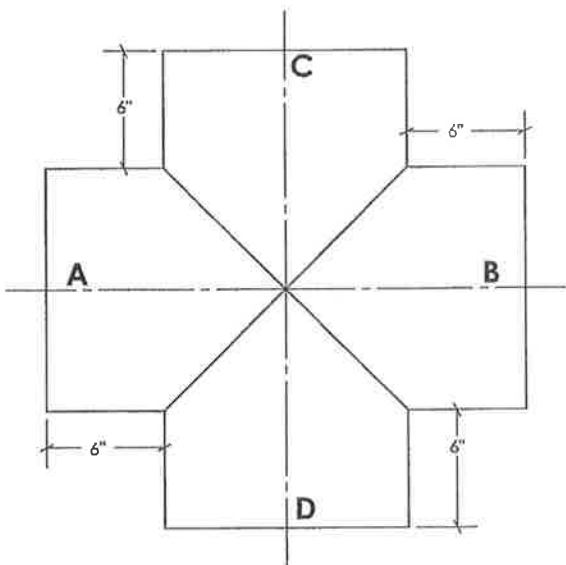
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		DIMENSIONS ARE IN INCHES		NAME	DATE	<i>Spunstrand Inc.</i>
		TOLERANCES:		DRAWN	CJS	
		FRACTIONAL ±		CHECKED		Double 90deg Lateral
		ANGULAR; MACH ± BEND ±		ENG APPR.		
		TWO PLACE DECIMAL ±		MFG APPR.		
		THREE PLACE DECIMAL ±		Q.A.		
		MATERIAL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



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

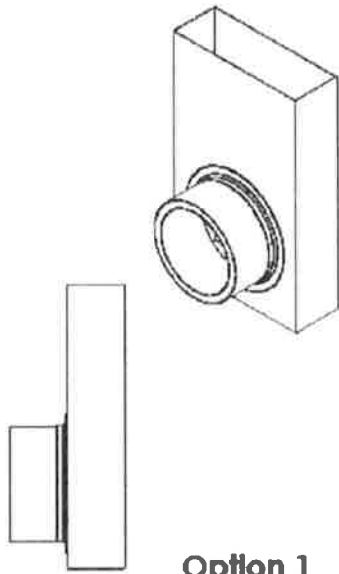
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		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	NAME CJS	DATE 2009
		MATERIAL	CHECKED	
		FINISH	ENG APPR.	
NEXT ASSY	USED ON		MFG APPR.	
APPLICATION	DO NOT SCALE DRAWING		Q.A.	
	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

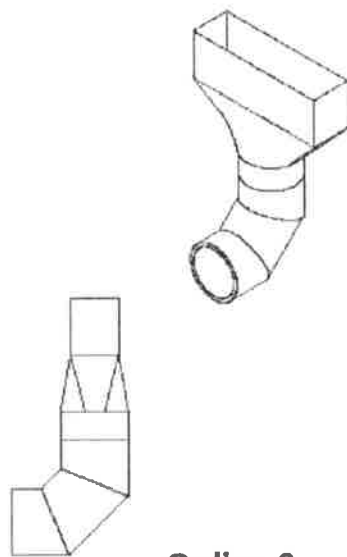
Spunstrand Inc.

Cross

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



Option 1



Option 2

<p>CUSTOMER DRAWING APPROVAL _____ APPROVED _____ APPROVED AS NOTED</p>		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	<p>Spunstrand Inc.</p>		
		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL: _____ ANGULAR: MATCH: MINUS ± TWO PLACE DECIMAL: 2 THREE PLACE DECIMAL: 3		DBAWN	C.J.S			8/25/10
COMMENTS:	AUTHORIZED SIGNATURE _____ DATE _____ THE SIGNATORY HEREBY VERIFIES THIS DRAWING IS BEING CORRECT AND AUTHORIZES SPUNSTRAND INC. TO PROCEED WITH MANUFACTURING. THE SIGNATORY ASSUMES RESPONSIBILITY FOR SUBSEQUENT CHANGE REQUESTS, IF ANY, TO THE PRODUCT REPRESENTED ON THIS DRAWING AFTER COMMENCEMENT OF MANUFACTURING AND RECOGNIZES THAT SAID CHANGES MAY RESULT IN ADDITIONAL CHARGES.		Construction: Rein: _____ Liner: Spunstrand Case: 20000 Brand: FRP		CHECKED _____ ENG APPR. _____ MFG APPR. _____ Q.A. _____		TITLE: Spunstrand FRP Register Boot Options	
	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.		SIZE A DWG. NO. Reg Boot Options DO NOT SCALE DRAWING		REV _____ SHEET 1 OF 1			