

V.A. HOSPITAL  
AHU PERFORMANCE DATA AND COMPONENT INFORMATION

UNIT NO. 100-AH4

FAN SECTION

<u>MODEL</u>	<u>FAN TYPE</u>	<u>FAN ARGMT</u>	<u>CFM MAX/MIN</u>	<u>DESIGN O.A. CFM</u>	<u>ESP</u>	<u>TSP</u>	<u>RPM</u>	<u>BHP</u>
CS113FO	FCMP AT	T1	7,530/4,730	3,860	2.8	3.33	1027	6.7

MOTOR

<u>HP</u>	<u>FRAME</u>	<u>WEIGHT</u>	<u>VOLTAGE</u>	<u>RPM</u>	<u>TYPE</u>	<u>UNIT MTR LOC</u>	<u>VSD INVERTER</u>	<u>SHEAVE TYPE</u>
7.5 10	213T	112	460	1800	H.E. ODP	TR	YES	FIXED

COIL DATA

<u>COIL SECT</u>	<u>COIL LOCATION</u>	<u># OF COILS</u>	<u>COIL HAND</u>	<u>CONN. SIZE (INCH)</u>	<u>ROWS/ FINS</u>	<u>WPD</u>	<u>APD</u>	<u>CIR</u>	<u>TH X FL</u>
156B-R	PREHEAT	1	R	1-1/4-MPT	1/8	9.6	.07	B	22 X 62
156G-S	COOLING	1	R	2-1/2-MPT	6/8	8.1	.46	C	28 X 62

COIL PERFORMANCE

<u>COIL LOCATION</u>	<u>CFM</u>	<u>FPM</u>	<u>EDB/EWB</u>	<u>LDB/LWB</u>	<u>TMBH</u>	<u>GPM</u>	<u>EWI</u>	<u>LWT</u>
PREHEAT	7,530	636	15/-	35/-	179	18	180	160
COOLING	7,530	500	86.2/71.7	58.4/57.5	355	60	44	56

FILTER DATA

<u>FILTER LOCATION</u>	<u>TYPE</u>	<u>EFF.</u>	<u>U.L. CLSS</u>	<u>FILE NO.</u>	<u>QTY-SIZE</u>	<u>FILTER BANK W X H</u>	<u>S.P. INT./FIN.</u>
PREFILTER	4" PLEATED	30%	II	100-PF4	4-20X25 2-20X20	70X38	.2/.7

V.A. HOSPITAL  
AHU PERFORMANCE DATA AND COMPONENT INFORMATION

UNIT NO. 100-AH20

FAN SECTION

<u>MODEL</u>	<u>FAN TYPE</u>	<u>FAN ARGMT</u>	<u>CFM MAX/MIN</u>	<u>DESIGN O.A. CFM</u>	<u>ESP</u>	<u>TSP</u>	<u>RPM</u>	<u>BHP</u>
CS270FO	FCMP	R1	15,880/3,850	2,310	3.7	4.61	890	19.1

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MOTOR

<u>HP</u>	<u>FRAME</u>	<u>WEIGHT</u>	<u>VOLTAGE</u>	<u>RPM</u>	<u>TYPE</u>	<u>UNIT MTR LOC</u>	<u>VSD INVERTER</u>	<u>SHEAVE TYPE</u>
20 15	256T	287	460	1800	H.E. ODP	TR	YES	FIXED

COIL DATA

<u>COIL SECT</u>	<u>COIL LOCATION</u>	<u># OF COILS</u>	<u>COIL HAND</u>	<u>CONN. SIZE (INCH)</u>	<u>ROWS/ FINS</u>	<u>WPD</u>	<u>APD</u>	<u>CIR</u>	<u>TH X FL</u>
270B-R	PREHEAT	1	R	2-MPT	1/8	3.6	.08	A	30 X 86
270G-E	COOLING	1	R	3-MPT	8/10	9.7	.83	C	36 X 90

COIL PERFORMANCE

<u>COIL LOCATION</u>	<u>CFM</u>	<u>FPM</u>	<u>EDB/EWB</u>	<u>LDB/LWB</u>	<u>TMBH</u>	<u>GPM</u>	<u>EWI</u>	<u>LWT</u>
PREHEAT	15,380	687	15/-	35/-	338	33.8	180	160
COOLING	15,380	547	79.5/65	53/52	588	98	44	56

FILTER DATA

<u>FILTER LOCATION</u>	<u>TYPE</u>	<u>EFF.</u>	<u>U.L. CLSS</u>	<u>BANK NO.</u>	<u>QTY-SIZE</u>	<u>FILTER BANK W X H</u>	<u>S.P. INT./FIN.</u>
PREFILTER	4" PLEATED	30%	II	100-PF21	8-20X25 2-16X25	94X47	.24X.70
FINAL	12" PLEATED	85%	II	100-AF20	8-24X24	96X51.5	.48/1.0

V.A. HOSPITAL  
AHU PERFORMANCE DATA AND COMPONENT INFORMATION

UNIT NO. 100-AH57

FAN SECTION

<u>MODEL</u>	<u>FAN TYPE</u>	<u>FAN ARGMT</u>	<u>CFM MAX/MIN</u>	<u>DESIGN O.A. CFM</u>	<u>ESP</u>	<u>TSP</u>	<u>RPM</u>	<u>BHP</u>
CS270FO	FCMP X	R1	13,600/7,990	7,990	4.1	5.04	928	17.1

MOTOR

<u>HP</u>	<u>FRAME</u>	<u>WEIGHT</u>	<u>VOLTAGE</u>	<u>RPM</u>	<u>TYPE</u>	<u>UNIT MTR LOC</u>	<u>VSD INVERTER</u>	<u>SHEAVE TYPE</u>
20	256T	287	460	1800	H.E. ODP	TL	YES	FIXED

COIL DATA

<u>COIL SECT</u>	<u>COIL LOCATION</u>	<u># OF COILS</u>	<u>COIL HAND</u>	<u>CONN. SIZE (INCH)</u>	<u>ROWS/ FINS</u>	<u>WPD</u>	<u>APD</u>	<u>CIR</u>	<u>TH X FL</u>
270B-R	PREHEAT	1	L	2-MPT	1/8	4.0	.07	A	30 X 86
270G-S	COOLING	1	L	3-MPT	8/12	9.8	.87	B	36 X 86

COIL PERFORMANCE

<u>COIL LOCATION</u>	<u>CFM</u>	<u>FPM</u>	<u>EDB/EWB</u>	<u>LDB/LWB</u>	<u>TMBH</u>	<u>GPM</u>	<u>EWT</u>	<u>LWT</u>
PREHEAT	13,600	607	15/-	39/-	362.5	36	180	160
COOLING	13,600	506	83.6/76.7	54/53.1	1101.6	184	44	56

FILTER DATA

<u>FILTER LOCATION</u>	<u>TYPE</u>	<u>EFF.</u>	<u>U.L. CLSS</u>	<u>BANK NO.</u>	<u>QTY-SIZE</u>	<u>FILTER BANK W X H</u>	<u>S.P. INT./FIN.</u>
PREFILTER	4" PLEATED	30%	II	100-PF57	8-20X25 2-16X25	94X47	.20/.70
FINAL	12" PLEATED	85%	II	100-AF57	8-24X24	96X51.5	.43/1.0

V.A. HOSPITAL  
AHU PERFORMANCE DATA AND COMPONENT INFORMATION

UNIT NO. 100-AH58

FAN SECTION

<u>MODEL</u>	<u>FAN TYPE</u>	<u>FAN ARGMT</u>	<u>CFM MAX/MIN</u>	<u>DESIGN O.A. CFM</u>	<u>ESP</u>	<u>TSP</u>	<u>RPM</u>	<u>BHP</u>
CS32FO	FCMP X	RI	2,600/2,600	2,600	3.35	3.97	1858	2.7

MOTOR

<u>HP</u>	<u>FRAME</u>	<u>WEIGHT</u>	<u>VOLTAGE</u>	<u>RPM</u>	<u>TYPE</u>	<u>UNIT MTR LOC</u>	<u>VSD INVERTER</u>	<u>SHEAVE TYPE</u>
5	184T	76	460	1800	H.E. ODP	TR	NO	ADJUST- ABLE

COIL DATA

<u>COIL SECT</u>	<u>COIL LOCATION</u>	<u># OF COILS</u>	<u>COIL HAND</u>	<u>CONN. SIZE (INCH)</u>	<u>ROWS/ FINS</u>	<u>WPD</u>	<u>APD</u>	<u>CIR</u>	<u>TH X FL</u>
74B-R	PREHEAT	1	R	1-1/4-MPT	1/10	6.2	.05	B	14 X 44
74G-S	COOLING	1	R	2-1/2-MPT	8/12	15.0	.57	D	18 X 44

COIL PERFORMANCE

<u>COIL LOCATION</u>	<u>CFM</u>	<u>FPM</u>	<u>EDB/EWB</u>	<u>LDB/LWB</u>	<u>TMBH</u>	<u>GPM</u>	<u>EWT</u>	<u>LWT</u>
PREHEAT	2,600	486	15/-	51/-	103	10	180	160
COOLING	2,600	378	95/83*	51/50.9	313.6	52	44	56

\* ASSUMED TO BE 95/83 I.L.O. 85/83.

FILTER DATA

<u>FILTER LOCATION</u>	<u>TYPE</u>	<u>EFF.</u>	<u>U.L. CLSS</u>	<u>BANK NO.</u>	<u>QTY-SIZE</u>	<u>FILTER BANK W X H</u>	<u>S.P. INT./FIN.</u>
PREFILTER	4" PLEATED	30%	II	100-PF58	2-20X25 1-16X25	52X26	.09/.7
FINAL	12" PLEATED	85%	II	100-AF58	2-24X24	48X27.25	.34/1.0

V.A. HOSPITAL  
AHU PERFORMANCE DATA AND COMPONENT INFORMATION

UNIT NO. 100-AH77

FAN SECTION

<u>MODEL</u>	<u>FAN TYPE</u>	<u>FAN ARGMT</u>	<u>CFM MAX/MIN</u>	<u>DESIGN O.A. CFM</u>	<u>ESP</u>	<u>TSP</u>	<u>RPM</u>	<u>BHP</u>
CS156FO	FCMP AF	R1	8,500/2,840	1,910	4.1	4.89	1109	10.9

MOTOR

<u>HP</u>	<u>FRAME</u>	<u>WEIGHT</u>	<u>VOLTAGE</u>	<u>RPM</u>	<u>TYPE</u>	<u>UNIT MTR LOC</u>	<u>VSD INVERTER</u>	<u>SHEAVE TYPE</u>
15	256T	259	460	1800	H.E. ODP	TL	YES	FIXED

COIL DATA

<u>COIL SECT</u>	<u>COIL LOCATION</u>	<u># OF COILS</u>	<u>COIL HAND</u>	<u>CONN. SIZE (INCH)</u>	<u>ROWS/ FINS</u>	<u>WPD</u>	<u>APD</u>	<u>CIR</u>	<u>TH X FL</u>
156B-R	PREHEAT	1	L	1-1/4-MPT	1/8	10.6	.09	B	22 X 62
156G-S	COOLING	1	L	2-1/2-MPT	6/12	14.7	.7	C	28 X 62

COIL PERFORMANCE

<u>COIL LOCATION</u>	<u>CFM</u>	<u>FPM</u>	<u>EDB/EWB</u>	<u>LDB/LWB</u>	<u>TMBH</u>	<u>GPM</u>	<u>EWT</u>	<u>LWT</u>
PREHEAT	8,500	718	15/-	35/-	187	19	180	160
COOLING	8,500	545	82.5/66.8	53.5/52.7	367.1	61	44	56

FILTER DATA

<u>FILTER LOCATION</u>	<u>TYPE</u>	<u>EFF.</u>	<u>U.L. CLSS</u>	<u>BANK NO.</u>	<u>QTY-SIZE</u>	<u>FILTER BANK W X H</u>	<u>S.P. INT./FIN.</u>
PREFILTER	4" PLEATED	30%	II	100-PF77	4-20X25 2-20X20	70X38	.23X.70
FINAL	12" PLEATED	85%	II	100-AF77	3-24X24 3-12X24	72X39.5	.48/1.0

V.A. HOSPITAL  
AHU PERFORMANCE DATA AND COMPONENT INFORMATION

UNIT NO. 100-AH78

FAN SECTION

<u>MODEL</u>	<u>FAN TYPE</u>	<u>FAN ARGMT</u>	<u>CFM MAX/MIN</u>	<u>DESIGN O.A. CFM</u>	<u>ESP</u>	<u>TSP</u>	<u>RPM</u>	<u>BHP</u>
CS32FO	FCMP AF	R1	2,600/2,600	2,600	3.35	3.97	1858	2.7

MOTOR

<u>HP</u>	<u>FRAME</u>	<u>WEIGHT</u>	<u>VOLTAGE</u>	<u>RPM</u>	<u>TYPE</u>	<u>UNIT MTR LOC</u>	<u>VSD INVERTER</u>	<u>SHEAVE TYPE</u>
5	184T	76	460	1800	H.E. ODP	TR	NO	ADJUST- ABLE

COIL DATA

<u>COIL SECT</u>	<u>COIL LOCATION</u>	<u># OF COILS</u>	<u>COIL HAND</u>	<u>CONN. SIZE (INCH)</u>	<u>ROWS/ FINS</u>	<u>WPD</u>	<u>APD</u>	<u>CIR</u>	<u>TH X FL</u>
74B-R	PREHEAT	1	R	1-1/4-MPT	1/10	7.2	.05	B	14 X 44
74G-E	COOLING	1	R	2-1/2-MPT	8/12	15	.57	D	18 X 48

COIL PERFORMANCE

<u>COIL LOCATION</u>	<u>CFM</u>	<u>FPM</u>	<u>EDB/EWB</u>	<u>LDB/LWB</u>	<u>TMBH</u>	<u>GPM</u>	<u>EWI</u>	<u>LWT</u>
PREHEAT	2,600	486	15/-	51/-	103	10	180	160
COOLING	2,600	347	95/83.* 85	51/50.9	314.7	52	44	56

\* ASSUMED TO BE 95/85 I.L.O. 85/83.

FILTER DATA

<u>FILTER LOCATION</u>	<u>TYPE</u>	<u>EFF.</u>	<u>U.L. CLSS</u>	<u>BANK NO.</u>	<u>QTY-SIZE</u>	<u>FILTER BANK W X H</u>	<u>S.P. INT./FIN.</u>
PREFILTER	4" PLEATED	30%	II	100-PF78	2-20X25 1-16X25	52X26	.09/.70
FINAL	12"	85%	II	100-AF78	2-24X24	48X27.5	.34/1.0

# FAN PERFORMANCE RATING

SALES OFFICE: HOUSTON  
SALESMAN: GEW

JOB NAME: VA HOSP.  
ITEM NO.: 100-AH4

UNIT	CFM	TSP	RPM	BHP	ALT	TEMP
CS 113 FQ FCMP	7530.	3.33	1027.	6.7	0.	55.0

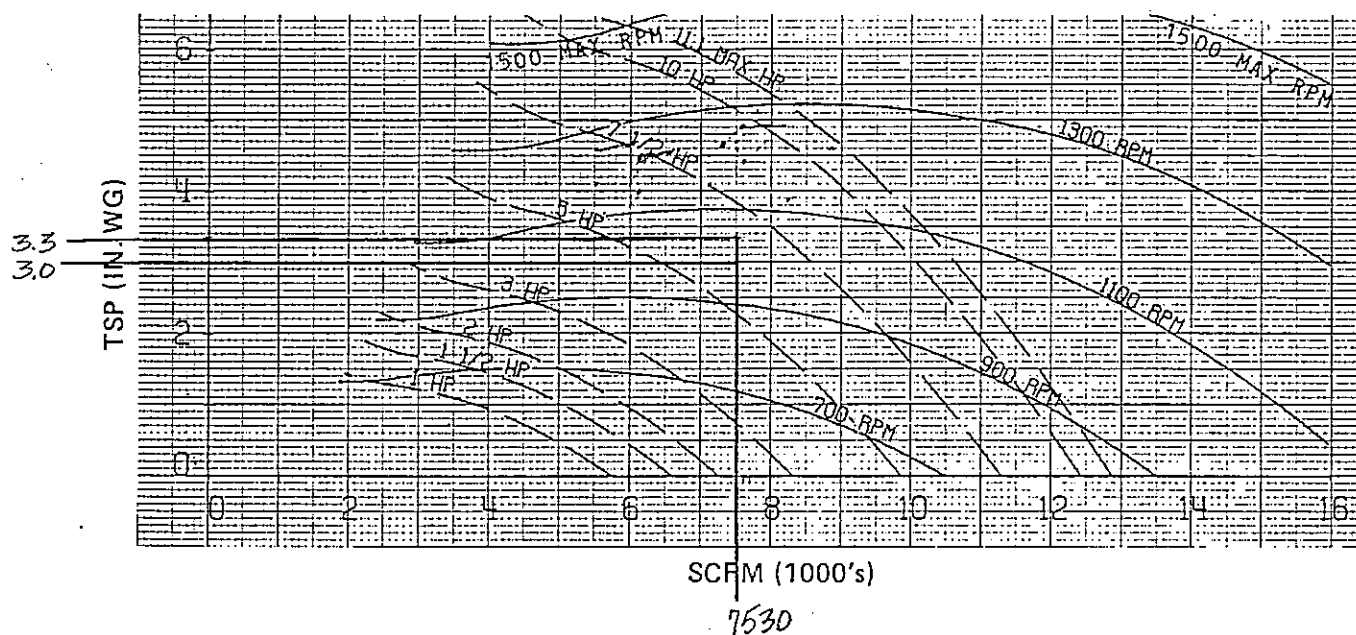
## FREQUENCY / CALCULATED SOUND POWER

CFM	TSP	RPM	BHP	125	250	500	1000	2000	4000	8000
7530.	3.33	1027.	6.7	91	92	90	92	84	81	76

Static Eff = 58.9%

## CS 113 SH FCMP

100-AH4



SP →			1.6		1.8		2.0		2.2		2.4		2.6		2.8	
CFM	FACE VEL		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	5/8	1/2														
4500	397	401	719	1.9	765	2.1	809	2.3	852	2.6	894	2.9	936	3.2	976	3.5
5000	441	445	720	2.1	763	2.3	805	2.6	845	2.9	886	3.1	925	3.4	963	3.7
5500	485	489	724	2.4	765	2.6	804	2.9	843	3.1	881	3.4	919	3.7	955	4.0
6000	529	534	732	2.7	770	3.0	808	3.2	845	3.5	881	3.8	917	4.0	952	4.3
6500	574	578	741	3.1	778	3.4	815	3.6	850	3.9	884	4.2	918	4.4	952	4.8
7000	618	623	753	3.5	788	3.8	823	4.1	857	4.4	890	4.6	923	4.9	955	5.2
7500	662	667	767	4.0	800	4.3	833	4.6	866	4.9	899	5.2	930	5.5	961	5.8
8000	706	712	784	4.6	815	4.9	846	5.2	877	5.5	908	5.8	939	6.1	969	6.4
8500	750	756	803	5.2	832	5.5	862	5.8	891	6.1	920	6.4	949	6.7	978	7.1
9000	794	801	823	5.9	851	6.2	879	6.5	907	6.8	934	7.1	962	7.5	989	7.8
9500	838	845	845	6.7	872	7.0	898	7.3	924	7.6	950	7.9	976	8.3	1002	8.6
10000	882	889	868	7.5	893	7.8	918	8.2	943	8.5	968	8.8	993	9.2	1018	9.5
10500	926	934	892	8.4	916	8.8	940	9.1	963	9.4	987	9.8	1011	10.1	1035	10.5

SP →			3.0		3.5		4.0		4.5		5.0		5.5		6.0	
CFM	FACE VEL		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	5/8	1/2														
4500	397	401	1015	3.8	1110	4.6	1200	5.5	1281	6.4	1356	7.3	1425	8.2	1490	9.1
5000	441	445	1001	4.0	1092	4.8	1179	5.7	1263	6.6	1343	7.6	1416	8.6	1484	9.6
5500	485	489	991	4.3	1079	5.1	1163	6.0	1244	6.9	1322	7.9	1398	8.9	1471	10.0
6000	529	534	986	4.7	1070	5.5	1151	6.3	1229	7.3	1304	8.2	1378	9.3	1449	10.4
6500	574	578	985	5.1	1065	5.9	1143	6.8	1218	7.7	1291	8.7	1362	9.7	1431	10.8
7000	618	623	986	5.5	1064	6.4	1138	7.2	1211	8.2	1281	9.2	1350	10.2	---	---
7500	662	667	991	6.1	1065	6.9	1137	7.8	1207	8.7	1275	9.7	1342	10.8	---	---
8000	706	712	998	6.7	1069	7.5	1139	8.4	1206	9.4	1272	10.4	---	---	---	---
8500	750	756	1007	7.4	1076	8.2	1143	9.1	1208	10.1	1271	11.1	---	---	---	---
9000	794	801	1016	8.1	1085	9.0	1149	9.9	1212	10.8	---	---	---	---	---	---
9500	838	845	1028	9.0	1093	9.9	1157	10.8	---	---	---	---	---	---	---	---
10000	882	889	1042	9.9	1104	10.8	---	---	---	---	---	---	---	---	---	---
10500	926	934	1058	10.8	---	---	---	---	---	---	---	---	---	---	---	---



# FAN PERFORMANCE RATING

SALES OFFICE: HOUSTON  
SALESMAN: GEW

JOB NAME: VA HOSPITAL  
ITEM NO.: 100-AH20

UNIT	CFM	TSP	RPM	BHP	ALT	TEMP
CS 270 FO FCMP	15880.	4.61	890.	19.1	0.	70.0

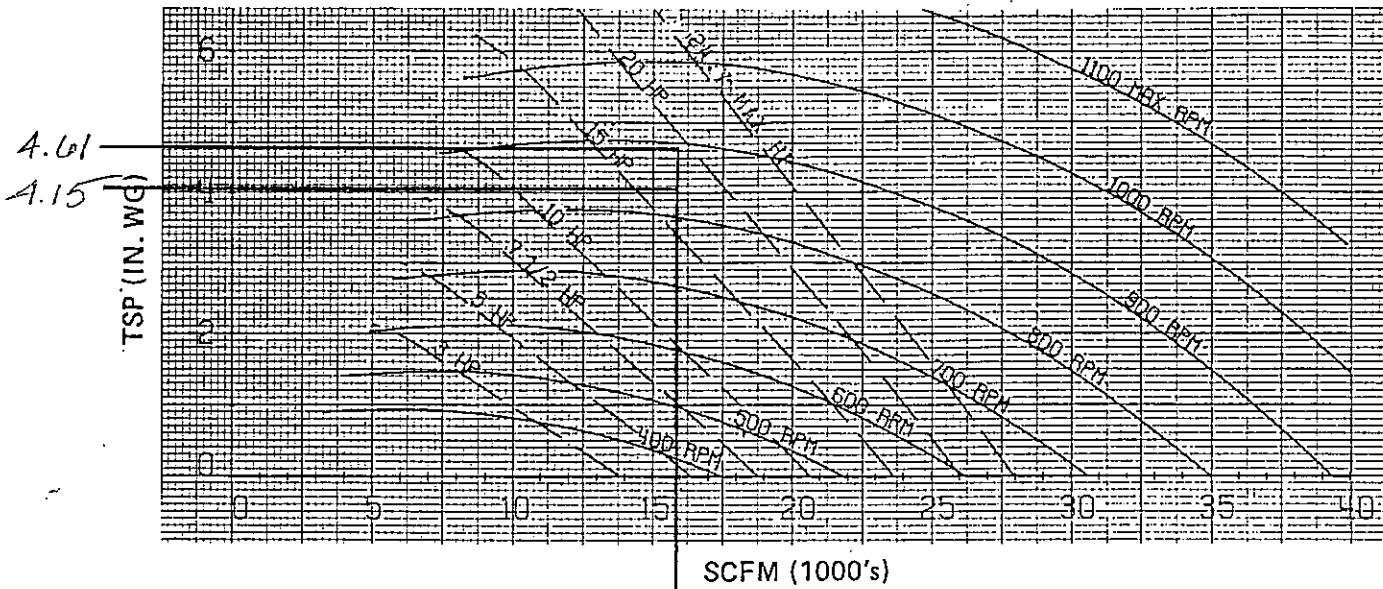
## FREQUENCY / CALCULATED SOUND POWER

CFM	TSP	RPM	BHP	125	250	500	1000	2000	4000	8000
15880.	4.61	890.	19.1	97	98	95	98	90	87	83

Static eff = 60.4%

# CS 270 SH FCMP

100-AH20



SP			1.6		1.8		2.0		2.2		2.4		2.6		2.8	
CFM	FACE VEL		RPM		RPM		RPM		RPM		RPM		RPM		RPM	
	5/8	1/2		BHP		BHP		BHP		BHP		BHP		BHP		BHP
10000	371	373	527	4.3	556	4.7	585	5.1	613	5.6	640	6.1	666	6.5	691	7.0
11000	408	410	533	4.9	561	5.4	588	5.8	614	6.3	641	6.8	666	7.3	691	7.8
12000	445	447	540	5.6	568	6.1	594	6.6	619	7.1	644	7.6	668	8.1	692	8.7
13000	482	484	549	6.4	575	7.0	601	7.5	626	8.0	650	8.6	673	9.1	696	9.7
14000	519	521	559	7.3	584	7.9	609	8.5	633	9.0	656	9.6	679	10.2	701	10.8
15000	556	559	570	8.3	595	8.9	619	9.5	642	10.1	664	10.7	687	11.3	708	11.9
16000	593	596	582	9.4	606	10.0	629	10.7	651	11.3	673	11.9	695	12.6	716	13.2
17000	630	633	594	10.6	617	11.3	640	11.9	662	12.6	683	13.3	704	14.0	725	14.6
18000	667	670	607	11.9	630	12.6	652	13.3	674	14.0	694	14.7	715	15.4	734	16.2
19000	704	707	621	13.3	643	14.0	664	14.8	685	15.5	706	16.3	726	17.0	745	17.8
20000	741	745	636	14.8	656	15.6	677	16.4	697	17.2	717	18.0	737	18.8	756	19.6
21000	778	782	651	16.5	671	17.3	691	18.1	710	18.9	730	19.8	749	20.6	768	21.4
22000	815	819	667	18.4	686	19.2	705	20.0	724	20.9	743	21.7	761	22.6	780	23.5
23000	852	856	683	20.3	702	21.2	720	22.1	739	22.9	757	23.8	---	---	---	---
24000	889	894	700	22.5	718	23.4	736	24.3	---	---	---	---	---	---	---	---

SP			3.0		3.5		4.0		4.5		5.0		5.5		6.0	
CFM	FACE VEL		RPM		RPM		RPM		RPM		RPM		RPM		RPM	
	5/8	1/2		BHP		BHP		BHP		BHP		BHP		BHP		BHP
10000	371	373	716	7.5	774	8.6	830	9.9	882	11.1	932	12.5	980	14.0	1026	15.5
11000	408	410	715	8.3	773	9.6	827	10.9	879	12.2	928	13.6	975	15.0	1021	16.5
12000	445	447	716	9.2	773	10.6	826	12.0	877	13.4	926	14.8	972	16.2	1017	17.8
13000	482	484	718	10.2	773	11.7	826	13.1	876	14.6	924	16.2	970	17.7	1014	19.2
14000	519	521	723	11.3	776	12.8	827	14.4	876	16.0	923	17.6	969	19.2	1012	20.8
15000	556	559	729	12.6	781	14.1	829	15.7	878	17.4	924	19.1	969	20.8	1012	22.5
16000	593	596	737	13.9	787	15.5	834	17.2	880	18.9	925	20.7	969	22.5	1012	24.3
17000	630	633	745	15.3	794	17.0	840	18.8	885	20.6	928	22.4	971	24.2	---	---
18000	667	670	754	16.9	801	18.7	847	20.5	891	22.4	933	24.3	---	---	---	---
19000	704	707	764	18.5	810	20.4	855	22.4	898	24.3	---	---	---	---	---	---
20000	741	745	775	20.3	820	22.3	863	24.3	---	---	---	---	---	---	---	---
21000	778	782	786	22.3	830	24.4	---	---	---	---	---	---	---	---	---	---
22000	815	819	798	24.3	---	---	---	---	---	---	---	---	---	---	---	---
23000	852	856	---	---	---	---	---	---	---	---	---	---	---	---	---	---
24000	889	894	---	---	---	---	---	---	---	---	---	---	---	---	---	---

# FAN PERFORMANCE RATING

SALES OFFICE: HOUSTON  
SALESMAN: GEW

JOB NAME: VA HOSPITAL, HOUSTON  
ITEM NO.: 100-AH57

UNIT	CFM	TSP	RPM	BHP	ALT	TEMP
----	---	---	---	---	---	----
CS 270 FO FCMP	13600.	5.04	928.	17.1	0.	70.0

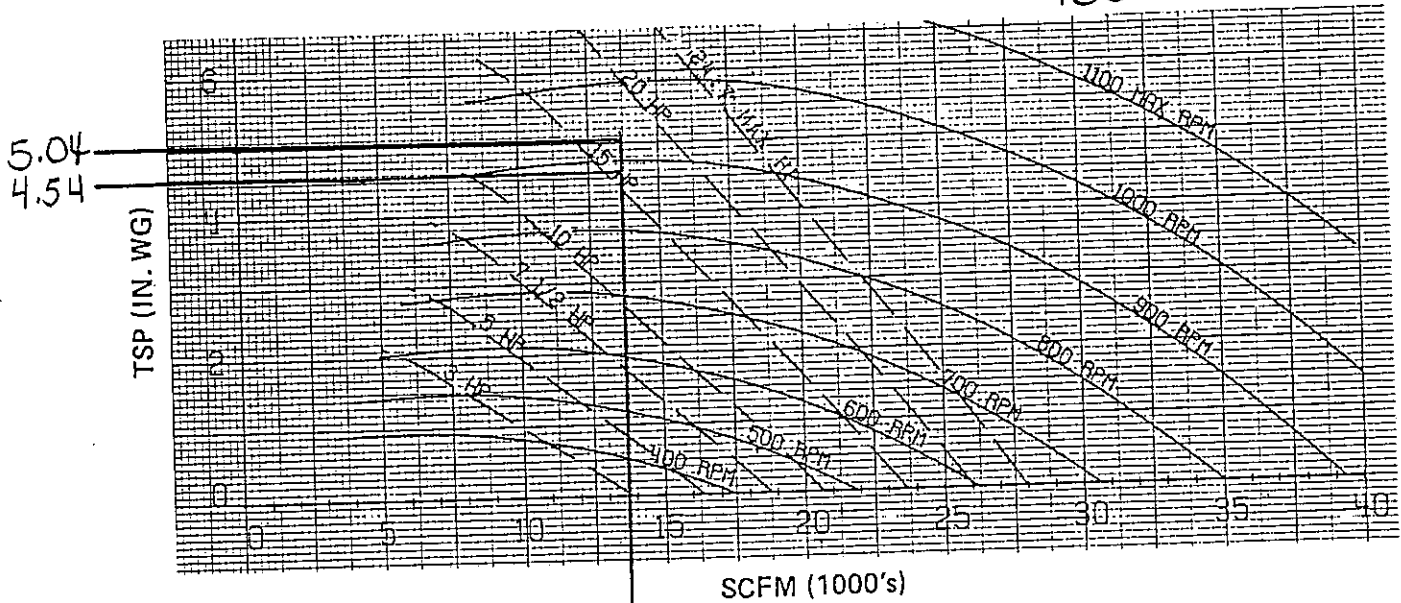
## FREQUENCY / CALCULATED SOUND POWER

CFM	TSP	RPM	BHP	125	250	500	1000	2000	4000	8000
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13600.	5.04	928.	17.1	96	97	94	96	89	86	82

STATIC EFF = 63.1%

# CS 270 SH FCMP

100-AH57



13600

SP		1.6		1.8		2.0		2.2		2.4		2.6		2.8	
CFM	FACE VEL	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	5/8 1/2														
10000	371 373	527 4.3	556 4.7	585 5.1	613 5.6	640 6.1	666 6.5	691 7.0							
11000	408 410	533 4.9	561 5.4	588 5.8	614 6.3	641 6.8	666 7.3	691 7.8							
12000	445 447	540 5.6	568 6.1	594 6.6	619 7.1	644 7.6	668 8.1	692 8.7							
13000	482 484	549 6.4	575 7.0	601 7.5	626 8.0	650 8.6	673 9.1	696 9.7							
14000	519 521	559 7.3	584 7.9	609 8.5	633 9.0	656 9.6	679 10.2	701 10.8							
15000	556 559	570 8.3	595 8.9	619 9.5	642 10.1	664 10.7	687 11.3	708 11.9							
16000	593 596	582 9.4	606 10.0	629 10.7	651 11.3	673 11.9	695 12.6	716 13.2							
17000	630 633	594 10.6	617 11.3	640 11.9	662 12.6	683 13.3	704 14.0	725 14.6							
18000	667 670	607 11.9	630 12.6	652 13.3	674 14.0	694 14.7	715 15.4	734 16.2							
19000	704 707	621 13.3	643 14.0	664 14.8	685 15.5	706 16.3	726 17.0	745 17.8							
20000	741 745	636 14.8	656 15.6	677 16.4	697 17.2	717 18.0	737 18.8	756 19.6							
21000	778 782	651 16.5	671 17.3	691 18.1	710 18.9	730 19.8	749 20.6	768 21.4							
22000	815 819	667 18.4	686 19.2	705 20.0	724 20.9	743 21.7	761 22.6	780 23.5							
23000	852 856	683 20.3	702 21.2	720 22.1	739 22.9	757 23.8	775 24.7	793 25.6							
24000	889 894	700 22.5	718 23.4	736 24.3	754 25.2	772 26.1	790 27.0	808 27.9							

SP		3.0		3.5		4.0		4.5		5.0		5.5		6.0	
CFM	FACE VEL	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	5/8 1/2														
10000	371 373	716 7.5	774 8.6	830 9.9	882 11.1	932 12.5	980 14.0	1026 15.5							
11000	408 410	715 8.3	773 9.6	827 10.9	879 12.2	928 13.6	975 15.0	1021 16.5							
12000	445 447	716 9.2	773 10.6	826 12.0	877 13.4	926 14.8	972 16.2	1017 17.8							
13000	482 484	718 10.2	773 11.7	826 13.1	876 14.6	924 16.2	970 17.7	1014 19.2							
14000	519 521	723 11.3	776 12.8	827 14.4	876 16.0	923 17.6	969 19.2	1012 20.8							
15000	556 559	729 12.6	781 14.1	829 15.7	878 17.4	924 19.1	969 20.8	1012 22.5							
16000	593 596	737 13.9	787 15.5	834 17.2	880 18.9	925 20.7	969 22.5	1012 24.3							
17000	630 633	745 15.3	794 17.0	840 18.8	885 20.6	928 22.4	971 24.2	1012 26.1							
18000	667 670	754 16.9	801 18.7	847 20.5	891 22.4	933 24.3	975 26.1	1012 28.0							
19000	704 707	764 18.5	810 20.4	855 22.4	898 24.3	939 26.1	981 28.0	1012 30.0							
20000	741 745	775 20.3	820 22.3	863 24.3	905 26.1	945 28.0	987 29.9	1012 32.0							
21000	778 782	786 22.3	830 24.4	872 26.1	914 28.0	953 30.0	995 31.9	1012 34.0							
22000	815 819	798 24.3	842 26.1	884 28.0	926 30.0	965 31.9	1007 33.9	1012 36.0							
23000	852 856	810 26.1	854 28.0	896 30.0	938 31.9	977 33.9	1019 35.9	1012 38.0							
24000	889 894	822 28.0	866 30.0	908 31.9	950 33.9	989 35.9	1031 37.9	1012 40.0							

# FAN PERFORMANCE RATING

SALES OFFICE: HOUSTON  
SALESMAN: GEW

JOB NAME: VA HOSPITAL, HOUSTON  
ITEM NO.: 100-AH58

UNIT	CFM	TSP	RPM	BHP	ALT	TEMP
----	---	---	---	---	---	----
CS 32 FO FCMP	2600.	3.97	1858.	2.7	0.	52.0

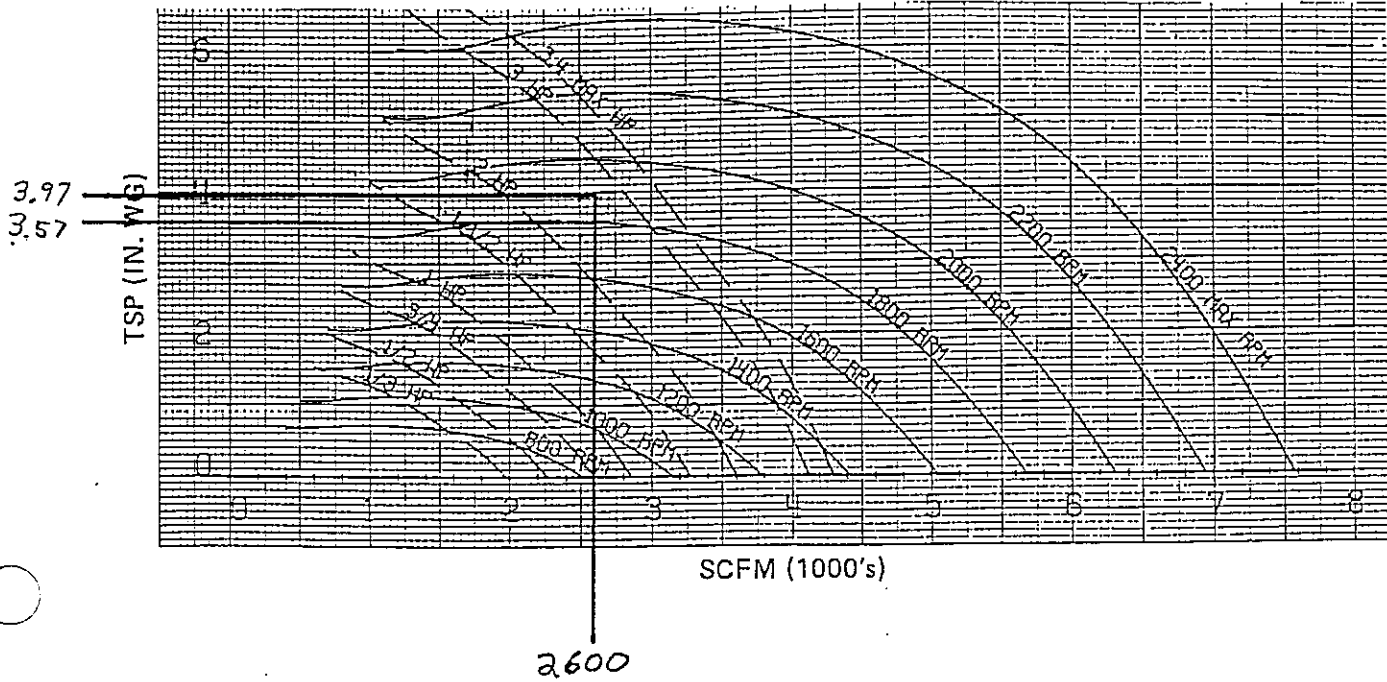
## FREQUENCY / CALCULATED SOUND POWER

CFM	TSP	RPM	BHP	125	250	500	1000	2000	4000	8000
---	---	---	---	---	---	---	---	---	---	---
2600.	3.97	1858.	2.7	88	89	86	84	86	78	73

STATIC EFF = 60.2%

# CS 32 SH FCMP

100-AH58



SP →			0.4		0.6		0.8		1.0		1.5		2.0		2.5	
CFM	FACE	VEL	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	5/8	1/2														
600	189	193	602	0.1	748	0.1	873	0.1	978	0.2	1196	0.3	---	---	---	---
800	252	257	599	0.1	735	0.1	855	0.2	964	0.2	1197	0.4	1384	0.5	1545	0.7
1000	315	321	607	0.1	734	0.2	847	0.2	950	0.3	1179	0.4	1377	0.6	1546	0.8
1200	378	385	625	0.2	742	0.2	848	0.3	946	0.3	1165	0.5	1357	0.6	1531	0.8
1400	441	449	650	0.2	758	0.3	858	0.3	951	0.4	1159	0.5	1344	0.7	1513	0.9
1600	504	513	682	0.3	781	0.3	874	0.4	962	0.5	1161	0.6	1339	0.8	1501	1.0
1800	567	577	722	0.3	809	0.4	896	0.5	978	0.6	1169	0.7	1339	0.9	1496	1.1
2000	630	641	768	0.4	843	0.5	923	0.6	1000	0.7	1181	0.9	1346	1.1	1497	1.3
2200	693	705	818	0.6	884	0.6	954	0.7	1027	0.8	1198	1.0	1356	1.2	1503	1.5
2400	756	769	871	0.7	930	0.8	991	0.9	1057	0.9	1219	1.2	1370	1.4	1513	1.7
2600	819	833	925	0.9	978	1.0	1034	1.0	1092	1.1	1244	1.4	1389	1.6	1526	1.9

SP →			3.0		3.5		4.0		4.5		5.0		5.5		6.0	
CFM	FACE	VEL	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	5/8	1/2														
600	189	193	---	---	---	---	---	---	---	---	---	---	---	---	---	---
800	252	257	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1000	315	321	1695	1.0	1830	1.2	1954	1.4	---	---	---	---	---	---	---	---
1200	378	385	1688	1.1	1829	1.3	1957	1.5	2076	1.8	2187	2.0	2292	2.3	2392	2.6
1400	441	449	1668	1.1	1814	1.4	1949	1.6	2072	1.9	2187	2.2	2295	2.5	2398	2.8
1600	504	513	1653	1.2	1794	1.5	1928	1.7	2056	2.0	2176	2.3	2288	2.6	2394	2.9
1800	567	577	1643	1.4	1781	1.6	1912	1.9	2036	2.2	2155	2.4	2269	2.8	2379	3.1
2000	630	641	1639	1.5	1773	1.8	1900	2.0	2022	2.3	2138	2.6	2250	2.9	2358	3.2
2200	693	705	1640	1.7	1770	2.0	1894	2.2	2013	2.5	2126	2.8	2236	3.1	---	---
2400	756	769	1646	1.9	1772	2.2	1893	2.4	2008	2.7	2119	3.0	2226	3.4	---	---
2600	819	833	1656	2.1	1778	2.4	1895	2.7	2008	3.0	2116	3.3	---	---	---	---

# FAN PERFORMANCE RATING

SALES OFFICE: HOUSTON  
SALESMAN: GEW

JOB NAME: VA HOSPITAL, HOUSTON  
ITEM NO.: 100-AH77

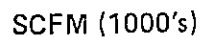
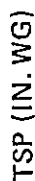
UNIT	CFM	TSP	RPM	BHP	ALT	TEMP
-----	---	---	---	---	---	----
CS 156 FD FCMP	8500.	4.89	1109.	10.9	0.	70.0

## FREQUENCY / CALCULATED SOUND POWER

CFM	TSP	RPM	BHP	125	250	500	1000	2000	4000	8000
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8500.	4.89	1109.	10.9	94	96	93	96	88	85	81

STATIC EFF = 60.1%

100-AH 77



SP →			1.6		1.8		2.0		2.2		2.4		2.6		2.8	
CFM	FACE VEL		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	5/8	1/2														
6500	417	432	635	2.9	670	3.2	705	3.5	739	3.8	773	4.1	806	4.4	838	4.7
7000	449	465	641	3.2	674	3.5	708	3.8	740	4.1	772	4.5	804	4.8	835	5.1
7500	481	498	647	3.6	680	3.9	712	4.2	743	4.5	774	4.9	804	5.2	834	5.6
8000	513	531	655	4.0	687	4.3	719	4.6	749	5.0	778	5.3	807	5.7	836	6.0
8500	545	565	664	4.4	695	4.8	725	5.1	755	5.5	784	5.8	812	6.2	839	6.6
9000	577	598	674	4.9	704	5.3	733	5.6	762	6.0	790	6.4	818	6.7	844	7.1
9500	609	631	686	5.5	714	5.8	742	6.2	770	6.6	797	6.9	824	7.3	851	7.7
10000	641	664	698	6.1	726	6.5	753	6.8	779	7.2	806	7.6	832	8.0	858	8.4
10500	673	697	712	6.8	738	7.1	764	7.5	790	7.9	815	8.3	840	8.7	865	9.1
11000	705	730	726	7.5	751	7.9	776	8.2	801	8.6	826	9.0	850	9.4	874	9.9
11500	737	764	741	8.3	765	8.7	789	9.1	813	9.5	837	9.9	860	10.3	884	10.7
12000	769	797	757	9.1	780	9.5	803	9.9	826	10.3	849	10.7	872	11.2	894	11.6
12500	801	830	773	10.0	795	10.4	818	10.9	840	11.3	862	11.7	884	12.1	906	12.6
13000	833	863	789	11.0	811	11.4	833	11.9	854	12.3	876	12.7	897	13.2	918	13.6
13500	865	896	806	12.1	827	12.5	849	12.9	869	13.4	890	13.8	911	14.3	931	14.7
14000	897	930	823	13.2	844	13.6	865	14.1	885	14.5	905	15.0	925	15.5	945	15.9

SP →			3.0		3.5		4.0		4.5		5.0		5.5		6.0	
CFM	FACE VEL		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	5/8	1/2														
6500	417	432	870	5.1	947	6.0	1021	7.0	1093	8.0	1162	9.1	1228	10.2	1289	11.3
7000	449	465	865	5.5	940	6.4	1012	7.4	1081	8.4	1148	9.5	1213	10.6	1277	11.8
7500	481	498	864	5.9	935	6.9	1005	7.8	1072	8.9	1137	10.0	1200	11.1	1262	12.3
8000	513	531	864	6.4	933	7.4	1000	8.4	1065	9.4	1128	10.5	1190	11.7	1250	12.9
8500	545	565	866	6.9	933	7.9	998	8.9	1061	10.0	1122	11.1	1182	12.3	1240	13.5
9000	577	598	870	7.5	935	8.5	997	9.6	1058	10.6	1118	11.8	1176	12.9	1233	14.1
9500	609	631	876	8.1	938	9.2	999	10.2	1058	11.3	1115	12.5	1172	13.7	1227	14.9
10000	641	664	883	8.8	943	9.9	1002	11.0	1059	12.1	1115	13.2	1170	14.4	1224	15.7
10500	673	697	890	9.5	950	10.6	1006	11.7	1062	12.9	1116	14.1	1169	15.3	1222	16.6
11000	705	730	898	10.3	956	11.4	1012	12.6	1066	13.8	1119	15.0	1171	16.2	---	---
11500	737	764	907	11.1	964	12.3	1019	13.5	1071	14.7	1123	15.9	---	---	---	---
12000	769	797	917	12.1	972	13.2	1026	14.4	1078	15.7	---	---	---	---	---	---
12500	801	830	928	13.0	981	14.2	1033	15.4	1085	16.7	---	---	---	---	---	---
13000	833	863	939	14.1	991	15.3	1042	16.5	---	---	---	---	---	---	---	---
13500	865	896	952	15.2	1002	16.4	---	---	---	---	---	---	---	---	---	---
14000	897	930	965	16.4	---	---	---	---	---	---	---	---	---	---	---	---



# FAN PERFORMANCE RATING

SALES OFFICE: HOUSTON  
SALESMAN: GEW

JOB NAME: VA HOSPITAL, HOUSTON  
ITEM NO.: 100-AH78

UNIT	CFM	TSP	RPM	BHP	ALT	TEMP
CS 32 FO FCMP	2600.	3.97	1858.	2.7	0.	52.0

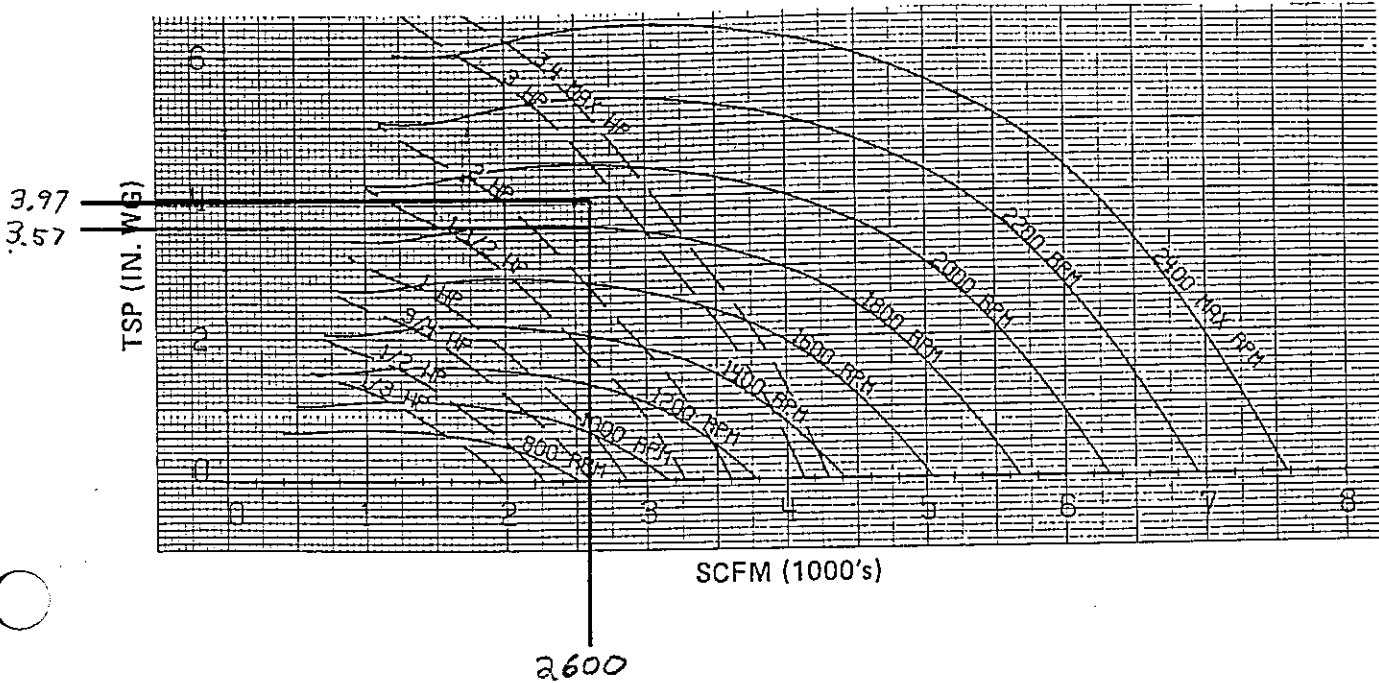
## FREQUENCY / CALCULATED SOUND POWER

CFM	TSP	RPM	BHP	125	250	500	1000	2000	4000	8000
2600.	3.97	1858.	2.7	88	89	86	84	86	78	73

STATIC EFF = 60.2%

# CS 32 SH FCMP

100 - AH 78



SP →			0.4		0.6		0.8		1.0		1.5		2.0		2.5	
CFM	FACE VEL		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	5/8	1/2														
600	189	193	602	0.1	748	0.1	873	0.1	978	0.2	1196	0.3	---	---	---	---
800	252	257	599	0.1	735	0.1	855	0.2	964	0.2	1197	0.4	1384	0.5	1545	0.7
1000	315	321	607	0.1	734	0.2	847	0.2	950	0.3	1179	0.4	1377	0.6	1546	0.8
1200	378	385	625	0.2	742	0.2	848	0.3	946	0.3	1165	0.5	1357	0.6	1531	0.8
1400	441	449	650	0.2	758	0.3	858	0.3	951	0.4	1159	0.5	1344	0.7	1513	0.9
1600	504	513	682	0.3	781	0.3	874	0.4	962	0.5	1161	0.6	1339	0.8	1501	1.0
1800	567	577	722	0.3	809	0.4	896	0.5	978	0.6	1169	0.7	1339	0.9	1496	1.1
2000	630	641	768	0.4	843	0.5	923	0.6	1000	0.7	1181	0.9	1346	1.1	1497	1.3
2200	693	705	818	0.6	884	0.6	954	0.7	1027	0.8	1198	1.0	1356	1.2	1503	1.5
2400	756	769	871	0.7	930	0.8	991	0.9	1057	0.9	1219	1.2	1370	1.4	1513	1.7
2600	819	833	925	0.9	978	1.0	1034	1.0	1092	1.1	1244	1.4	1389	1.6	1526	1.9

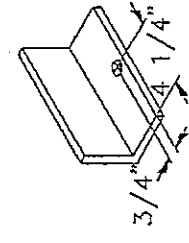
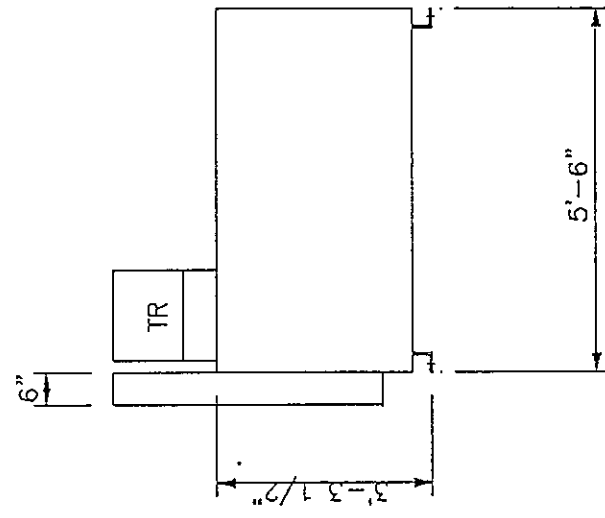
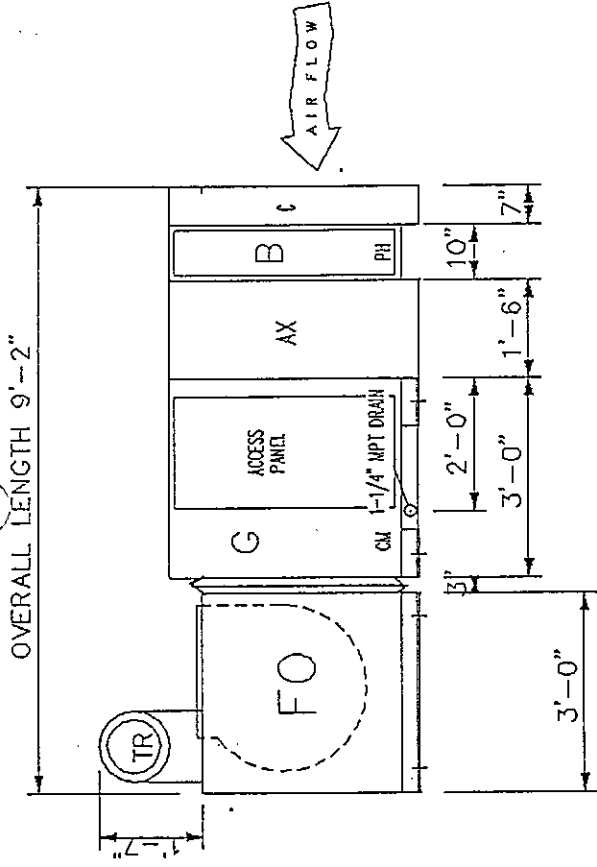
  

SP →			3.0		3.5		4.0		4.5		5.0		5.5		6.0	
CFM	FACE VEL		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	5/8	1/2														
600	189	193	---	---	---	---	---	---	---	---	---	---	---	---	---	---
800	252	257	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1000	315	321	1695	1.0	1830	1.2	1954	1.4	---	---	---	---	---	---	---	---
1200	378	385	1688	1.1	1829	1.3	1957	1.5	2076	1.8	2187	2.0	2292	2.3	2392	2.6
1400	441	449	1668	1.1	1814	1.4	1949	1.6	2072	1.9	2187	2.2	2295	2.5	2398	2.8
1600	504	513	1653	1.2	1794	1.5	1928	1.7	2056	2.0	2176	2.3	2288	2.6	2394	2.9
1800	567	577	1643	1.4	1781	1.6	1912	1.9	2036	2.2	2155	2.4	2269	2.8	2379	3.1
2000	630	641	1639	1.5	1773	1.8	1900	2.0	2022	2.3	2138	2.6	2250	2.9	2358	3.2
2200	693	705	1640	1.7	1770	2.0	1894	2.2	2013	2.5	2126	2.8	2236	3.1	---	---
2400	756	769	1646	1.9	1772	2.2	1893	2.4	2008	2.7	2119	3.0	2226	3.4	---	---
2600	819	833	1656	2.1	1778	2.4	1895	2.7	2008	3.0	2116	3.3	---	---	---	---

# UNIT OPERATING WEIGHTS

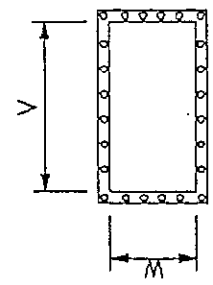
Weight includes: pre filter, heating coil, access section, cooling coil, fan, motor, diffuser and final filter.

TAG	WEIGHT (#)	TAG	WEIGHT (#)	TAG	WEIGHT (#)
100-AH1	10,400	100-AH37A	3,100	100-AH75	1,600
100-AH2	2,300	100-AH38	5,100	100-AH76	1,250
100-AH3	10,600	100-AH39	5,600	100-AH77	2,400
100-AH4	2,300	100-AH40	4,000	100-AH78	1,250
100-AH5	10,400	100-AH41	10,400	100-AH79	9,400
100-AH5A	1,750	100-AH42	2,400	100-AH80	4,800
100-AH6	9,400	100-AH43	1,250	100-AH81	1,700
100-AH7	4,000	100-AH44	3,100	100-AH82	1,300
100-AH8	N.I.C.	100-AH45	1,250	100-AH83	2,300
100-AH9	6,300	100-AH46	2,400	100-AH84	1,300
100-AH10	N.I.C.	100-AH47	1,250	100-AH85	3,100
100-AH11	4,850	100-AH48	2,400	100-AH86	850
100-AH12	1,050	100-AH49	1,250	100-AH87	2,800
100-AH13	5,100	100-AH50	7,900	100-AH88	1,250
100-AH14	1,050	100-AH51	6,500	100-AH89	3,100
100-AH15	2,800	100-AH52	5,600	100-AH90	1,250
100-AH16	1,050	100-AH53	7,900	100-AH91	2,400
100-AH17	2,800	100-AH54	9,400	100-AH92	1,250
100-AH18	1,050	100-AH55	2,800	100-AH93	2,800
100-AH19	2,800	100-AH56	850	100-AH94	1,250
100-AH20	4,000	100-AH57	4,000	100-AH95	2,800
100-AH21	7,900	100-AH58	1,250	100-AH96	1,050
100-AH22	5,700	100-AH59	2,800	100-AH97	3,100
100-AH23	7,000	100-AH60	1,250	100-AH98	5,100
100-AH24	5,600	100-AH61	2,400	105-AH1	600
100-AH25	2,300	100-AH62	1,250	100-MU1	700
100-AH26	7,900	100-AH63	2,800	100-MU2	175
100-AH27	5,700	100-AH64	1,250	100-MU3	N.I.C.
100-AH28	3,100	100-AH65	5,700	100-MU4	450
100-AH29	1,250	100-AH66	6,300	100-MU5	175
100-AH30	3,100	100-AH67	5,700	100-MU6	175
100-AH31	1,250	100-AH68	2,300	100-MU7	350
100-AH32	2,400	100-AH69	1,250	100-MU8	175
100-AH33	1,050	100-AH70	5,600	100-MU9	350
100-AH34	3,100	100-AH71	2,300	100-MU10	350
100-AH35	1,050	100-AH72	1,250	100-MU11	175
100-AH36	4,000	100-AH73	2,300		
100-AH37	5,700	100-AH74	1,250		



TYPICAL FOOT DETAIL

EQUALLY SPACED 1/4" HOLES  
PROVIDED THROUGH 2" FLANGES.

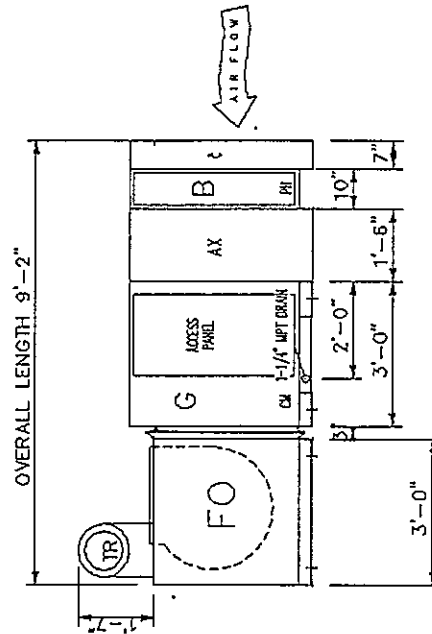
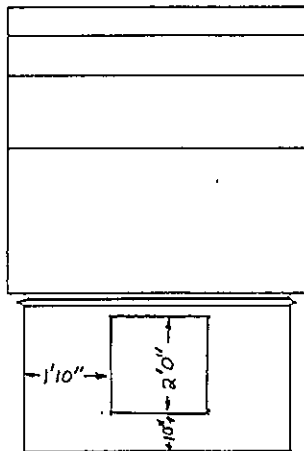


SECTION CONNECTION(S)  
SECTION V W  
FAN & '113' ACC'S --- 5'-2" 2'-8"  
'156' SIZE ACC'S ---- 5'-10" 3'-2"

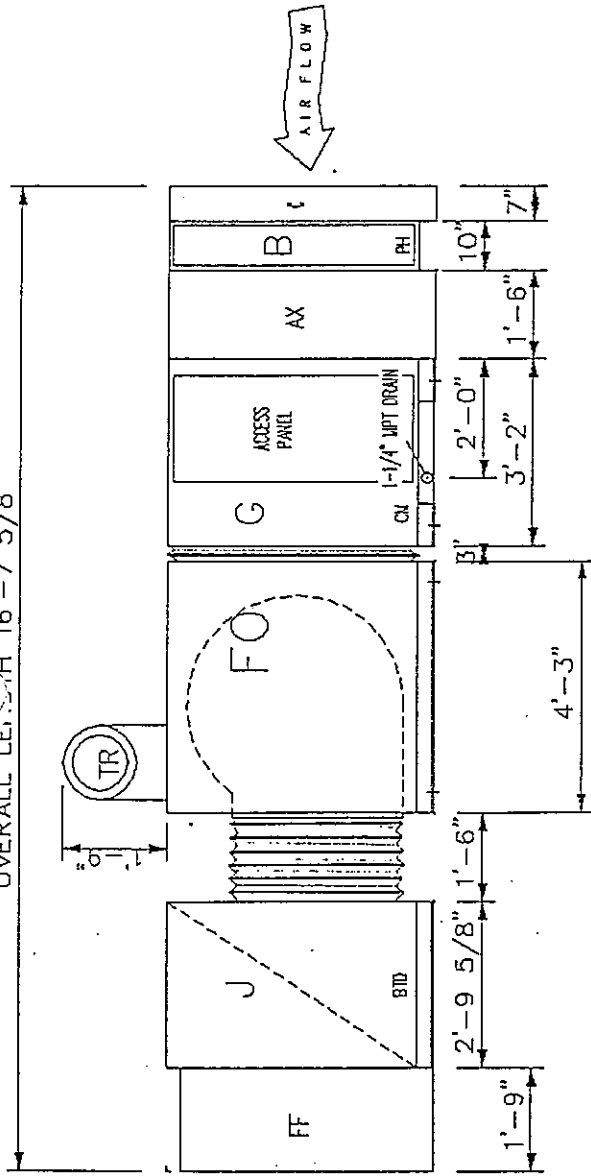
**YORK**  
INTERNATIONAL

Job Name: V.A. Hospital  
MODEL CS113-FO-FCMP  
Fan Only

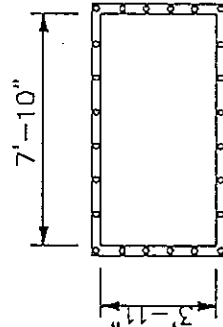
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Rev. Date:  
Dwg. Scale: 0.250"=1'



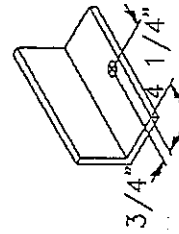
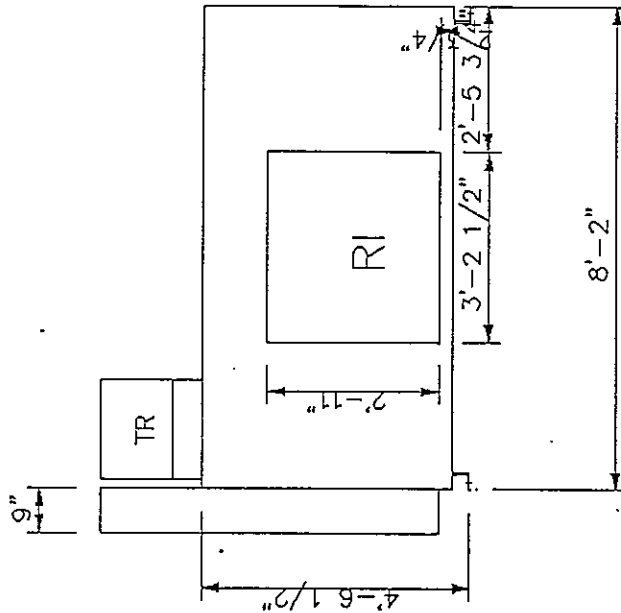
OVERALL LENGTH 16'-7 5/8"



EQUALLY SPACED 1/4" HOLES  
PROVIDED THROUGH 2" FLANGES.



SECTION CONNECTION(S)



TYPICAL FOOT DETAIL

**YORK**  
INTERNATIONAL  
Copyright (c) by York International Corp. 1996

PRODUCT DRAWING  
CS AIR HANDLING UNIT  
MODEL CS270-FO-FCMP  
Fan Only

Contractor: Natkin  
Order No.:  
York Contract No.: 7-51492  
York Order No.: 87916116  
Tag No.: 100-AH20

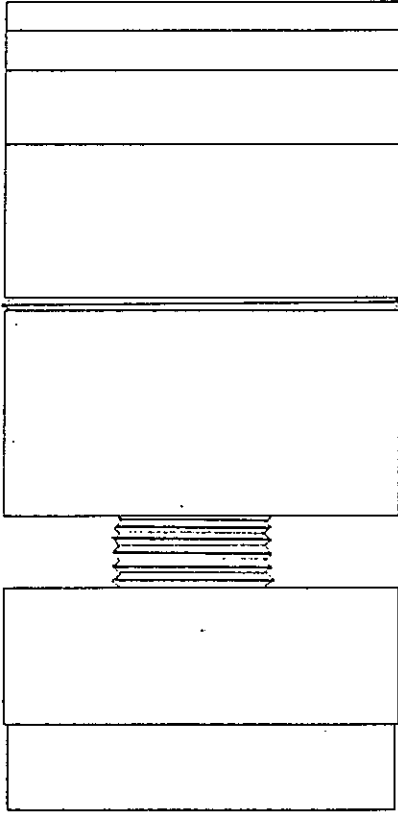
Purchaser: Natkin  
Job Name: V.A. Hospital  
Location: Houston, TX  
Engineer: Yandell & Hiller / 301  
For: Approval

Date: 30-Oct-87  
Rev. Date:  
Dwg. Lev.:  
Form No.:  
Dwg. Scale: NTS

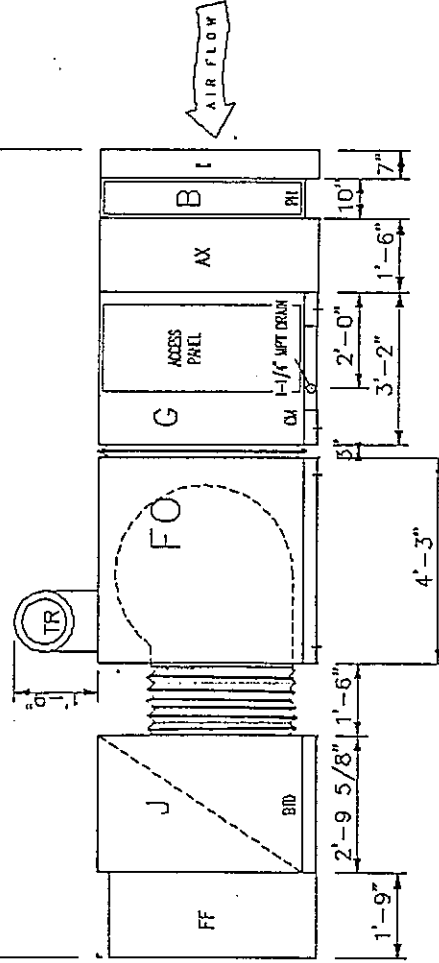
**YORK®**  
INTERNATIONAL

Job Name: V.A. Hospital  
MODEL CS270--FO--FCMP  
Fan Only

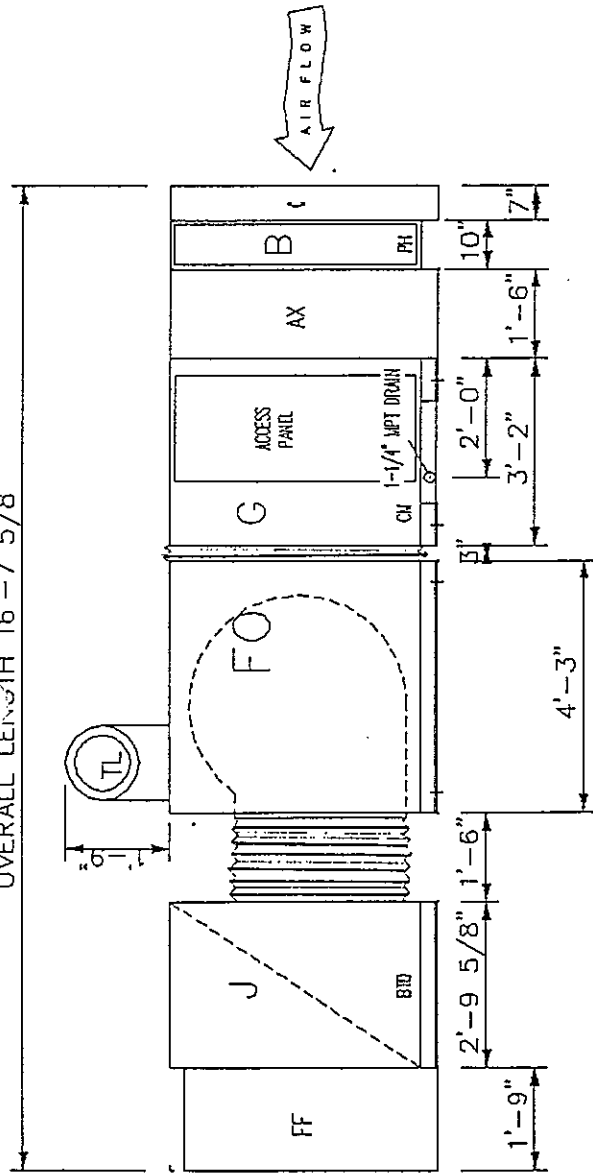
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Rev. Date:  
Dwg. Scale: 0.250"=1'



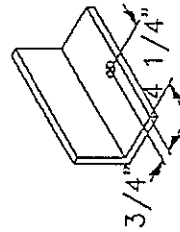
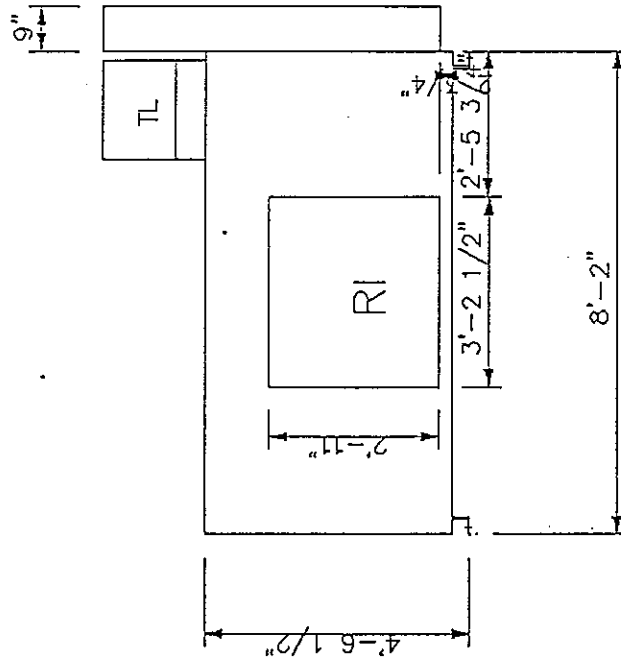
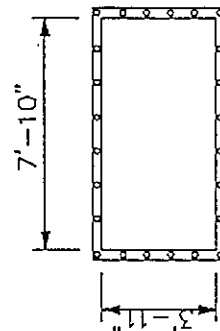
OVERALL LENGTH 16'-7 5/8"



OVERALL LENGTH 16'-7 5/8"



EQUALLY SPACED 1/4" HOLES PROVIDED THROUGH 2" FLANGES.



TYPICAL FOOT DETAIL

**YORK**  
INTERNATIONAL  
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**PRODUCT DRAWING**  
CS AIR HANDLING UNIT  
MODEL CS270-FO-FCMP  
Fan Only

Contractor: Natkin  
Order No.:  
York Contract No.: 7-51492  
York Order No.: 87916116  
Tag No.: 100-AH 57

Purchaser: Natkin  
Job Name: V.A. Hospital  
Location: Houston, TX  
Engineer: Yandell & Hiller / 3DI  
For: Approval

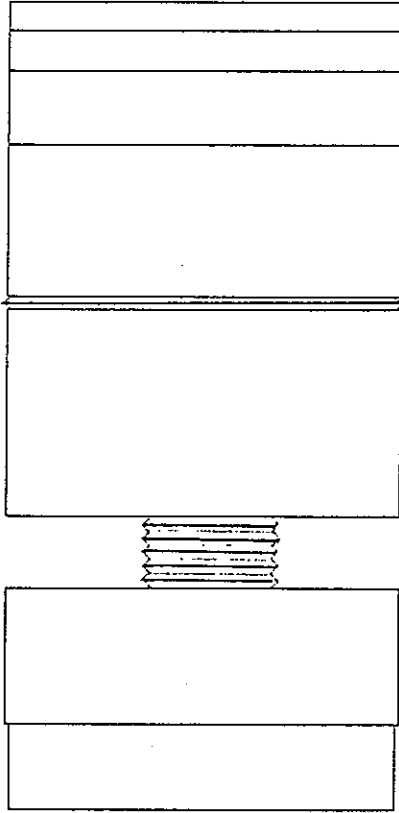
Date: 30-Oct-87  
Rev. Date:  
Dwg. Lev.:  
Form No.:  
Dwg. Scale: NTS



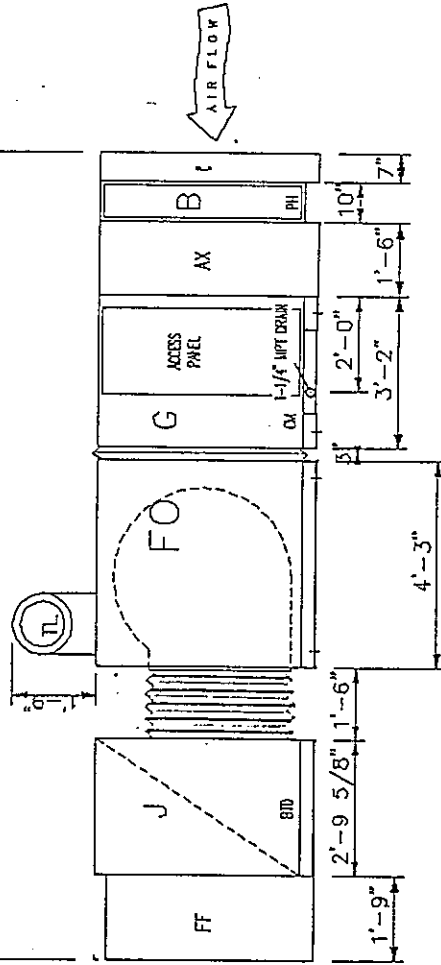
**YORK**  
INTERNATIONAL

Job Name: V.A. Hospital  
MODEL CS270-FO-FCMP  
Fan Only

Tag No.: 100-A#57  
Rev. Date:  
Dwg. Scale: 0.250"=1'



OVERALL LENGTH 16'-7 5/8"

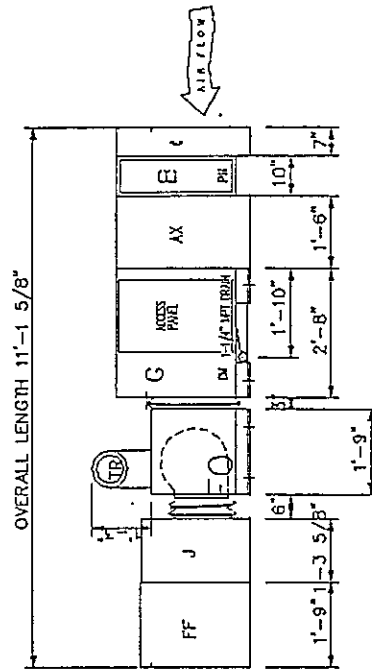
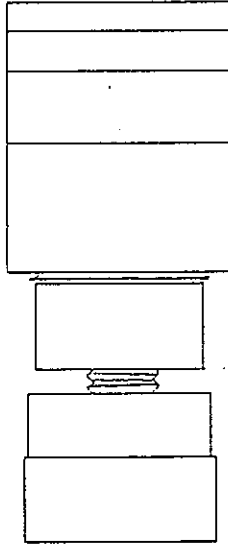


Date: 30-Oct-87  
Rev. Date:  
Dwg. Lev.:  
Form No.:  
Dwg. Scale: NTS

**YORK**  
INTERNATIONAL

Job Name: V.A. Hospital  
MODEL CS32-FO-FCMP  
Fan Only

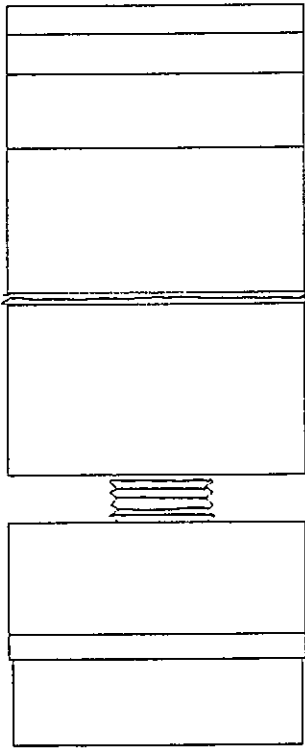
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Rev. Date:  
Dwg. Scale: 0.250"=1'



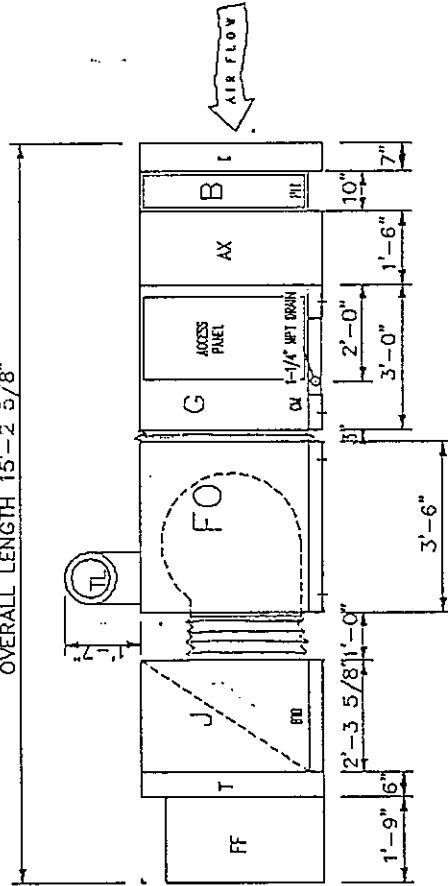
**YORK**  
INTERNATIONAL

Job Name: V.A. Hospital  
MODEL CS156-FO-FCMP  
Fan Only

Tag No.: 100-AH77  
Rev. Date:  
Dwg. Scale: 0.250"=1'



OVERALL LENGTH 15'-2 5/8"



Date: 30-Oct-87  
Rev. Date:  
Dwg. Lev.:  
Form No.:  
Dwg. Scale: NTS

**YORK**  
INTERNATIONAL

Job Name: V.A. Hospital  
MODEL CS32-FO-FCMP  
Fan Only

Tag No.: 100-AH 78  
Rev. Date:  
Dwg. Scale: 0.250"=1'

