

Appendix G – Fan Coil Unit Selection

This appendix contains the cut sheets and other data for the manufacturer information provided for the fan coil units used as a part of the design process. There is data from Carrier and Enviro-Tec included.

Please see the all the dedicated outdoor air system unit information on the following pages.

Fan Coil Unit Zones

Table G1 - Fan Coil Unit Zones

FCU-1			FCU-2		
Floors	4-10	11	Floors	4-10	11
Zone No	Space		Zone No	Space	
1	02	04	1	01	01
2	04	04	2	03	03
3	06	06	3	05	05
4	08	08	4	07	07
5	10	10	5	09	09
6	12	12	6	11	11
7	14	14	7	13	13
8	20	20	8	15	15
9	22	22	9	17	15
10	24	24	10	19	15
11	26	26	11	21	21
12	28	28	12	23	21
13	30	30	13	25	21
14	32	30	14	27	27
15	-	32	15	29	29
16	-	32	16	31	31
17	-	-	-	33	-
18	-	-	-	35	-

Table G2 - Hotel Guest Rooms

Floor	Room Types	No of Guestrooms													Total	
		1	3	5	7	9	11	12	14	20	22	28	30	35		
3	K/S	1	3	5	7	9	11	12	14	20	22	28	30	35	13	
3	QQ/S	4	6	17	19	25	27	29	31	33					9	
3	QQ/T	2	8	10	13	15	21	23	24	26					9	
3	QQ/AT	32													1	
4-10	K/S	1	3	5	7	9	11	12	14	19	20	28	30	35	13	x7
4-10	K/AT	17	22												2	x7
4-10	QQ/S	4	6	25	27	29	31	33							7	x7
4-10	QQ/T	2	8	10	13	15	21	23	24	26	32				10	x7
11	K/S	1	3	5	6	7	9	11	12	14	20	22	28	31	13	
11	K/T	13													1	
11	QQ/S	27	29												2	
11	QQ/T	8	10	24	26										4	
11	SK/AT	4													1	
11	SK/ST	30	32												2	
	Total														279	rooms

SAMPLE GUEST ROOM - NORTH SIDE

DOAS + FCU

ASHRAE PSYCHROMETRIC CHART NO. 1

Chart 1a

NORMAL TEMPERATURE
BAROMETRIC PRESSURE 29.921 INCHES OF MERCURY

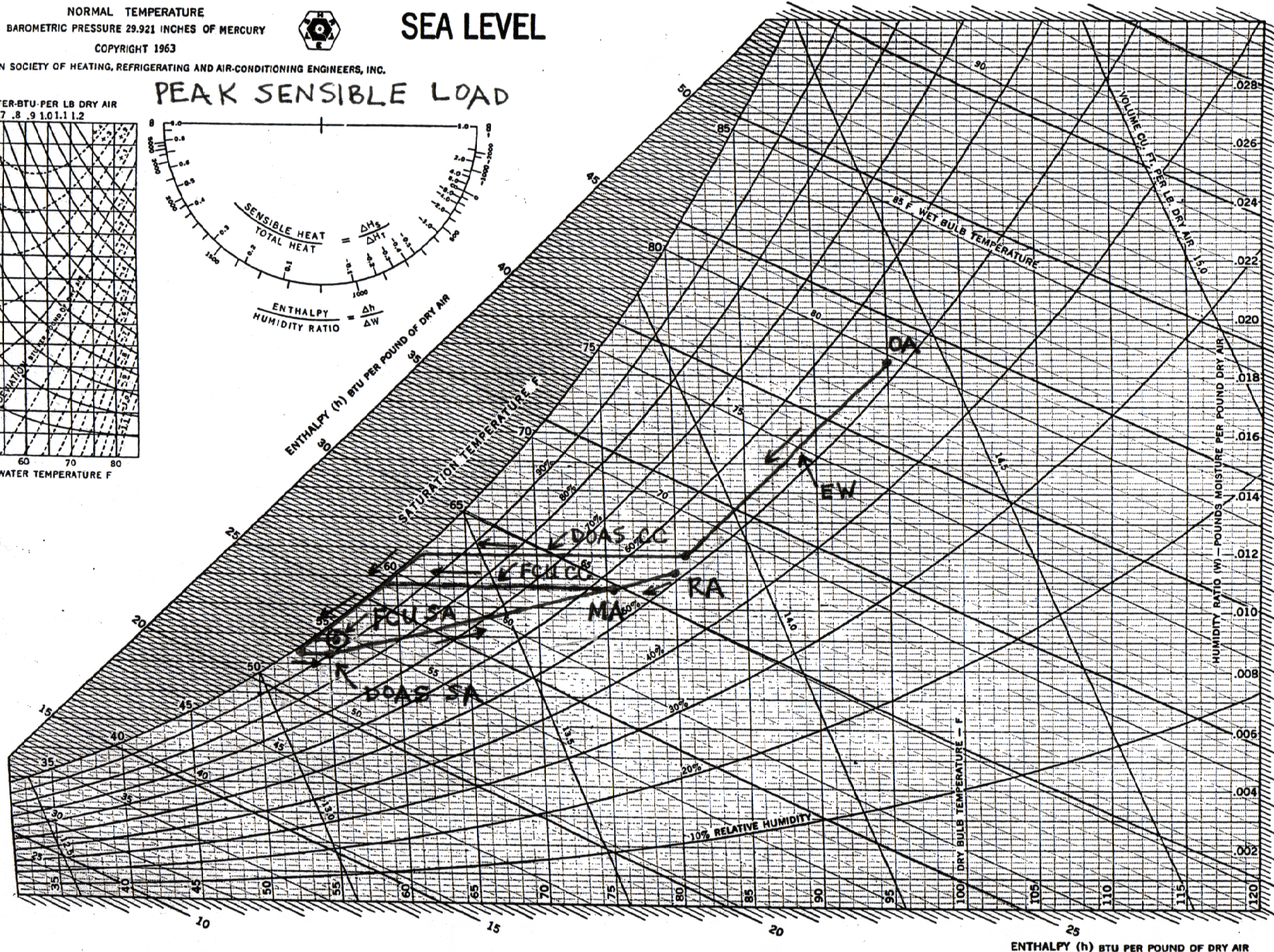
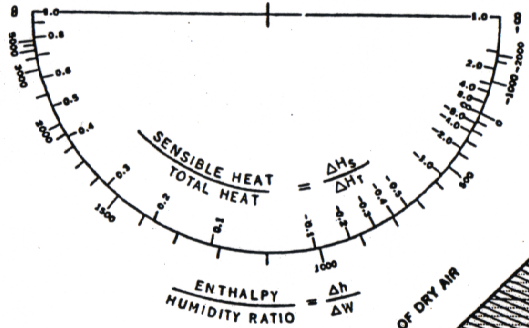
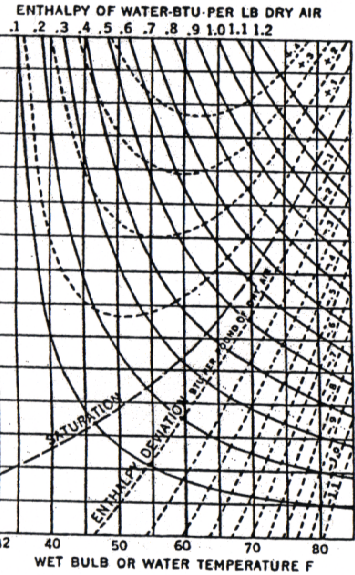


SEA LEVEL

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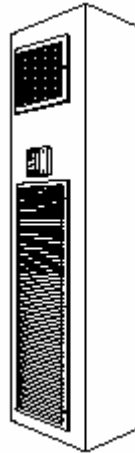
PEAK SENSIBLE LOAD



Unit Report For FCU-1

Project: Nathan- Thesis Project FCUs
 Prepared By:

03/29/2006
 03:56PM



Unit Parameters

Tag Name:.....**FCU-1**
 Quantity: **1**
 Unit Model:**42SGA03**
 Unit Type:**42SGA Concealed Modular Unit**
 Unit Size: **300**
 System Type:**4-Pipe Heating and Cooling**
 Cooling Coil: **Cold Fluid Cooling**
 Cooling Coil Rows: **3 Rows**
 Heating Coil:**Hot Fluid Heating**
 Heating Coil Rows: **1 Row**
 Shipping Options:**Standard**
 Fan Speed: **High**
 Motor/Drive:**Standard**

Dimensions

Unit Length: **17.00** in
 Unit Width: **17.00** in
 Unit Height: **88.00** in
 Shipping Weight: **225** lb

Electrical

Motor Voltage: **208-1-60** V-Ph-Hz

Warranty Information

First Year - Parts Only (Standard)

Ordering Information

Part Number	Description	Quantity
Base Unit		
	42SGA03	1
	4-Pipe Heating and Cooling	
	208-1-60 Motor Voltage	
	1 in. Throwaway Glass-Fiber	
	Bar Type Alum Finish Return Air Grille (Mod Panel 3)	
	Field Supplied/Inst Remote-Mtd Therm	
	Full Riser Chase	
	Std. Tufskin II Insulation	
	3 Rows Cooling, 1 Row Heating, Same end	
	Front Return / Front Supply	
	Std. Cabinet Size, Std. 88 in. Cabinet Height, Std. Riser Piping Order	
	Riser, Cooling Coil, Return, 3/4 in., Type L Copper, 1/2 in. Insulation	
	Riser, Cooling Coil, Supply, 1 in., Type L Copper, 1/2 in. Insulation	
	Riser, Drain, 1 in., Type L Copper, 1/2 in. Insulation	
	Riser, Heating Coil, Return, 3/4 in., Type L Copper, 1/2 in. Insulation	
	Riser, Heating Coil, Supply, 3/4 in., Type L Copper, 1/2 in. Insulation	

Unit Report For FCU-1

Project: Nathan- Thesis Project FCUs
Prepared By:

03/29/2006
03:56PM

	(1) Ball Valve, Return Line, Cooling Coil	
	(1) Ball Valve, Supply Line, Cooling Coil	
	(1) Ball Valve, Return Line, Heating Coil	
	(1) Ball Valve, Supply Line, Heating Coil	
	110 in. Floor to Floor Height	
	112 in. Risers	

Certified Drawing for FCU-1

Project: Nathan- Thesis Project FCUs
Prepared By:

03/29/2006
03:56PM

42SGA UNIT (W/ CHASE) 42SGA-1

- PCN 00-0210 TNW 08/10/00
A PCN 05-0962 KDW 08/08/05

NOTES:

- A. UNITS ARE FABRICATED OF GALVANIZED STEEL WITH A 16 GA GALVANIZED FAN DECK.
- B. ALL RISERS ARE INSULATED WITH 1/2" CLOSED CELL INSULATION.
- C. THERMOSTATS SHIPPED LOOSE FOR FIELD CONNECTION.
- D. RISERS ARE PIPED TO COIL WITH VALVES AS SPECIFIED.
- E. BLOWER, MOTOR, VALVES, COIL, AND FILTER ARE ACCESSIBLE THROUGH THE RETURN AIR OPENING.
- F. UNIT AND CONTROL BOX ARE INSULATED WITH 1/2" COATED GLASS FIBER INSULATION.
- G. RISER LENGTH=(FLOOR TO FLOOR)+2', MAXIMUM RISER LENGTH=115'.
- H. MAXIMUM RISER SIZE IS 2 1/2" DIA. IF LARGER SIZES ARE REQUIRED, PLEASE CONSULT THE FACTORY.
- I. EXPANSION LOOPS IN HOT WATER HEATING CIRCUITS AS REQUIRED.
- J. A 9"x8 1/4" SLOT IS PROVIDED IN THE INSIDE BACK PANEL FOR COIL CONNECTION PENETRATION TO PERMIT EXPANSION & CONTRACTION OF RISERS. CARE MUST BE TAKEN TO POSITION THE RISERS SO THAT COIL CONNECTION IS AT CENTER OF SLOT.
- K. DRG IS PICTORIAL (SEE UNIT ARRANGEMENTS FOR ACTUAL SUPPLY AND RETURN AIR ORIENTATION).
- L. FAN DECK AND CONTROL BOX ASSEMBLY RAISED 3" ON SIZES 08, 10, 12 ONLY. HIGH STATIC MOTOR/BLOWER ASSEMBLIES UTILIZED.
- M. #H# CABINET SIZE ON 08 HIGH STATIC MODELS IS 24" X 24".

MODEL	SGL. SUPPLY			DBLE. SUPPLY			TOP SUPPLY			DIMENSIONS					FILTER SIZE	
	A	B	SIZE	A	B	SIZE	C	D	SIZE	E	F	G	H	I		
42SGA 03	14	8	14X8	14	6	14X6	14	10	14X10	17	22	3/8	1 1/2	1 1/2	14	12 1/2 X 24 3/4 X 1
42SGA 04	14	12	14X12	14	6	14X6	14	10	14X10	17	22	3/8	1 1/2	1 1/2	14	12 1/2 X 24 3/4 X 1
42SGA 06	18	10	18X10	18	6	18X6	16	12	16X12	20	25	3/8	1	2	18	16 1/2 X 27 1/4 X 1
42SGA 08	18	12	18X12	18	6	18X6	16	12	16X12	20	25	3/8	1	2	18	16 1/2 X 27 1/4 X 1
42SGA 10				22	8	22X8	18	16	18X16	24	29	3/8	1	3	22	20 1/2 X 29 1/2 X 1
42SGA 12				22	8	22X8	18	16	18X16	24	29	3/8	1	3	22	20 1/2 X 29 1/2 X 1

ITEM	DESCRIPTION	QTY
1	MOTOR, 3 SPEED, PSC, SERIES "L"	1
2	COIL 1/2" O.D. COPPER TUBE	1
3	RISER, DRAIN, (COPPER)	1
4	RISER, SUPPLY & RETURN (COPPER)	2/4
5	CONTROL BOX	1
6	SUPPLY AIR OPENING(S)	1
7	DUCT COLLAR, 1/2" EXTENSION (TYPICAL)	1
8	CONTROL OPENING (SURFACE MOUNT STAT)	1
8a	KNICKOUT (FOR OPTIONAL REMOTE MOUNTING)	2
9	AIR VENT, MANUAL	1
10	RETURN AIR OPENING	1
11	3" EXPANDED SECTION	3/5
12	FILTER, THROWAWAY, 1", (F&I)	1
13	FLEXIBLE DRAIN TUBE/P-TRAP	1
14	BLOWER	1
15	DRAIN PAN	1
16	ACCESS PANEL (CONTROL BOX)	1
17	STRIP HEATER (OPTIONAL)	1
18	LIMIT SWITCH, (F&I) (OPTIONAL)	1
19	RISER CHASE (OPTIONAL)	1
20	MULEX CONNECTOR FOR FIELD INSTALLED STAT	1
21	ELECTRICAL KNICKOUTS	1
22	1/2" ISOLATION BALL VALVES (F&I)	2/4

(NOTE G)

RISER LENGTH

2 - PIPE 4 - PIPE

2 - PIPE W/ELECTRIC HEAT

TOTAL AUXILIARY

JOB NUMBER

FILE NAME

Carrier

DRAWN BY
TNW

DRAWING NUMBER REVISION SHEET

Performance Summary For FCU-1

Project: Nathan- Thesis Project FCUs
Prepared By:

03/29/2006
03:56PM

Unit Parameters

Tag Name:.....**FCU-1**
Quantity: **1**
Unit Model:**42SGA03**
Unit Type:**42SGA Concealed Modular Unit**
Unit Size: **300**
System Type:**4-Pipe Heating and Cooling**
Cooling Coil: **Cold Fluid Cooling**
Cooling Coil Rows: **3 Rows**
Heating Coil:**Hot Fluid Heating**
Heating Coil Rows: **1 Row**
Shipping Options:**Standard**
Fan Speed: **High**
Motor/Drive:**Standard**

Unit Performance

Actual Airflow:..... **330.0** CFM
Altitude: **0** ft
External Static Pressure: **.10** in wg
Voltage: **208-1-60** V-Ph-Hz

Cooling Data

Coil Type: **Cold Fluid Cooling**
Coil Rows: **3 Rows**
Fluid Type:.....**Fresh Water**
Total Capacity: **12633** BTU/hr
Sensible Capacity:..... **8825** BTU/hr
Entering Air Dry Bulb Temperature: **80.0** F
Entering Air Wet Bulb Temperature:..... **67.0** F
Leaving Air Dry Bulb Temperature: **55.5** F
Leaving Air Wet Bulb Temperature: **54.6** F
Fluid Flow Rate: **2.1** gpm
Fluid Pressure Drop:..... **21.86** ft wg
Fluid Entering Temperature:..... **44.0** F
Fluid Leaving Temperature:..... **56.0** F

Heating Data

Coil Type:**Hot Fluid Heating**
Coil Rows: **1 Row**
Fluid Type:.....**Fresh Water**
Sensible Capacity:..... **19597** BTU/hr
Entering Air Temperature: **60.0** F
Leaving Air Temperature: **114.3** F
Fluid Flow Rate: **2.0** gpm
Fluid Pressure Drop:..... **4.75** ft wg
Fluid Entering Temperature:..... **180.0** F
Fluid Leaving Temperature:..... **160.0** F

Electrical Data

Motor Voltage: **208-1-60** V-Ph-Hz
Motor Nominal HP: **1/30** hp
Total Motor Watts: **122**
Total Motor Amps: **0.31**

Acoustical Data

N/A
Sound Power 125 dB:..... **64.5**
Sound Power 250 dB:..... **57**
Sound Power 500 dB:..... **52.5**
Sound Power 1000 dB:..... **49**
Sound Power 2000 dB:..... **41**

Performance Summary For FCU-1

Project: Nathan- Thesis Project FCUs
Prepared By:

03/29/2006
03:56PM

Sound Power 4000 dB:..... **39**
Sound Power 8000 dB:..... **35.5**
Sound A Weight in dB: **55**

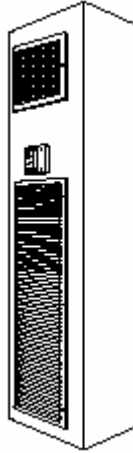
Factory-Installed Options

Coil Connections: **Same end**
Return:..... **Front Return**
Supply: **Front Supply**
Filters:..... **1 in. Throwaway Glass-Fiber**
Drain Pans:..... **Standard Main Drain Pan**
Return Air Options: **Bar Type Alum Finish (#3)**
Cabinet Size: **Standard Cabinet Size (17 in.)**
Cabinet Height:..... **Std.**
AAV / Drains:..... **Manual Air Vents only**
Control Packages: **Field Supplied/Inst Remote-Mtd Therm**
Single Power Source: **No**
Riser Chase:..... **Full Riser Chase**
Riser Piping Order: **Std.**

Unit Report For FCU-2

Project: Nathan- Thesis Project FCUs
 Prepared By:

03/29/2006
 03:56PM



Unit Parameters

Tag Name:.....FCU-2
 Quantity: 1
 Unit Model:42SGA04
 Unit Type:42SGA Concealed Modular Unit
 Unit Size: 400
 System Type:4-Pipe Heating and Cooling
 Cooling Coil: Cold Fluid Cooling
 Cooling Coil Rows: 3 Rows
 Heating Coil:Hot Fluid Heating
 Heating Coil Rows: 1 Row
 Shipping Options:Standard
 Fan Speed: High
 Motor/Drive:Standard

Dimensions

Unit Length: 17.00 in
 Unit Width: 17.00 in
 Unit Height: 88.00 in
 Shipping Weight: 225 lb

Electrical

Motor Voltage: 208-1-60 V-Ph-Hz

Warranty Information

First Year - Parts Only (Standard)

Ordering Information

Part Number	Description	Quantity
Base Unit		
	42SGA04	1
	4-Pipe Heating and Cooling	
	208-1-60 Motor Voltage	
	1 in. Throwaway Glass-Fiber	
	Bar Type Alum Finish Return Air Grille (Mod Panel 3)	
	Field Supplied/Inst Remote-Mtd Therm	
	Full Riser Chase	
	Std. Tufskin II Insulation	
	3 Rows Cooling, 1 Row Heating, Same end	
	Front Return / Front Supply	
	Std. Cabinet Size, Std. 88 in. Cabinet Height, Std. Riser Piping Order	
	Riser, Cooling Coil, Return, 3/4 in., Type L Copper, 1/2 in. Insulation	
	Riser, Cooling Coil, Supply, 1 in., Type L Copper, 1/2 in. Insulation	
	Riser, Drain, 1 in., Type L Copper, 1/2 in. Insulation	
	Riser, Heating Coil, Return, 3/4 in., Type L Copper, 1/2 in. Insulation	
	Riser, Heating Coil, Supply, 3/4 in., Type L Copper, 1/2 in. Insulation	

Unit Report For FCU-2

Project: Nathan- Thesis Project FCUs
Prepared By:

03/29/2006
03:56PM

	(1) Ball Valve, Return Line, Cooling Coil	
	(1) Ball Valve, Supply Line, Cooling Coil	
	(1) Ball Valve, Return Line, Heating Coil	
	(1) Ball Valve, Supply Line, Heating Coil	
	110 in. Floor to Floor Height	
	112 in. Risers	

Certified Drawing for FCU-2

Project: Nathan- Thesis Project FCUs
Prepared By:

03/29/2006
03:56PM

**42SGA
4-PIPE
OPTION**

42SGA UNIT (W/ CHASE)		42SGA-1
-	PCN 00-0210 TNW	08/10/00
A	PCN 05-0962 KDW	08/08/05

NOTES:

A. UNITS ARE FABRICATED OF GALVANIZED STEEL WITH A 16 GA GALVANIZED FAN DECK.

B. ALL RISERS ARE INSULATED WITH 1/2" CLOSED CELL INSULATION.

C. THERMOSTATS SHIPPED LOOSE FOR FIELD CONNECTION.

D. RISERS ARE PIPED TO COIL WITH VALVES AS SPECIFIED.

E. BLOWER, MOTOR, VALVES, COIL, AND FILTER ARE ACCESSIBLE THROUGH THE RETURN AIR OPENING.

F. UNIT AND CONTROL BOX ARE INSULATED WITH 1/2" COATED GLASS FIBER INSULATION.

G. RISER LENGTH=(FLOOR TO FLOOR)+2', MAXIMUM RISER LENGTH=115', MAXIMUM RISER SIZE IS 2 1/2" DIA. IF LARGER SIZES ARE REQUIRED, PLEASE CONSULT THE FACTORY.

H. EXPANSION LOOPS IN HOT WATER HEATING CIRCUITS AS REQUIRED.

I. A 9"x8 1/4" SLOT IS PROVIDED IN THE INSIDE BACK PANEL FOR COIL CONNECTION PENETRATION TO PERMIT EXPANSION & CONTRACTION OF RISERS. CARE MUST BE TAKEN TO POSITION THE RISERS SO THAT COIL CONNECTION IS AT CENTER OF SLOT.

J. DRG IS PICTORIAL (SEE UNIT ARRANGEMENTS FOR ACTUAL SUPPLY AND RETURN AIR ORIENTATION).

K. FAN DECK AND CONTROL BOX ASSEMBLY RAISED 3" ON SIZES 08, 10, 12 ONLY. HIGH STATIC MOTOR/BLOWER ASSEMBLIES UTILIZED.

L. CABINET SIZE ON 08 HIGH STATIC MODELS IS 24" X 24".

ITEM	DESCRIPTION	QTY
1	MOTOR, 3 SPEED, PSC, SERIES "L"	1
2	COIL 1/2" O.D. COPPER TUBE	1
3	RISER, DRAIN, (COPPER)	1
4	RISER, SUPPLY & RETURN (COPPER)	2/4
5	CONTROL BOX	1
6	SUPPLY AIR OPENING(S)	1
7	DUCT COLLAR, 1/2" EXTENSION (TYPICAL)	1
8	CONTROL OPENING (SURFACE MOUNT STAT)	1
8a	KNOCKOUT (FOR OPTIONAL REMOTE MOUNTING)	2
9	AIR VENT, MANUAL	1
10	RETURN AIR OPENING	1
11	3" EXPANDED SECTION	3/5
12	FILTER, THROWAWAY, 1", (F&I)	1
13	FLEXIBLE DRAIN TUBE/P-TRAP	1
14	BLOWER	1
15	DRAIN PAN	1
16	ACCESS PANEL (CONTROL BOX)	1
17	STRIP HEATER (OPTIONAL)	1
18	LIMIT SWITCH, (F&I) (OPTIONAL)	1
19	RISER CHASE (OPTIONAL)	1
20	MULEX CONNECTOR FOR FIELD INSTALLED STAT	1
21	ELECTRICAL KNOCKOUTS	1
22	1/2" ISOLATION BALL VALVES (F&I)	2/4

(NOTE G)

RISER LENGTH

MODEL	SGL. SUPPLY			DBLE. SUPPLY			TOP SUPPLY			DIMENSIONS					FILTER SIZE	
	A	B	SIZE	A	B	SIZE	C	D	SIZE	E	F	G	H	I		
42SGA 03	14	8	14X8	14	6	14X6	14	10	14X10	17	22	3/8	1 1/2	1 1/2	14	12 1/2 X 24 3/4 X 1
42SGA 04	14	12	14X12	14	6	14X6	14	10	14X10	17	22	3/8	1 1/2	1 1/2	14	12 1/2 X 24 3/4 X 1
42SGA 06	18	10	18X10	18	6	18X6	16	12	16X12	20	25	3/8	1	2	18	16 1/2 X 27 1/4 X 1
42SGA 08	18	12	18X12	18	6	18X6	16	12	16X12	20	25	3/8	1	2	18	16 1/2 X 27 1/4 X 1
42SGA 10				22	8	22X8	18	16	18X16	24	29	3/8	1	3	22	20 1/2 X 29 1/2 X 1
42SGA 12				22	8	22X8	18	16	18X16	24	29	3/8	1	3	22	20 1/2 X 29 1/2 X 1

2 - PIPE 4 - PIPE

2 - PIPE W/ELECTRIC HEAT

TOTAL AUXILIARY

JOB NUMBER

FILE NAME

DRAWN BY
TNW

DRAWING NUMBER REVISION SHEET

Performance Summary For FCU-2

Project: Nathan- Thesis Project FCUs
Prepared By:

03/29/2006
03:56PM

Unit Parameters

Tag Name:.....FCU-2
Quantity:..... 1
Unit Model:.....42SGA04
Unit Type:.....42SGA Concealed Modular Unit
Unit Size:..... 400
System Type:.....4-Pipe Heating and Cooling
Cooling Coil:..... Cold Fluid Cooling
Cooling Coil Rows:..... 3 Rows
Heating Coil:..... Hot Fluid Heating
Heating Coil Rows:..... 1 Row
Shipping Options:..... Standard
Fan Speed:..... High
Motor/Drive:..... Standard

Unit Performance

Actual Airflow:..... 400.0 CFM
Altitude:..... 0 ft
External Static Pressure:..... .15 in wg
Voltage:..... 208-1-60 V-Ph-Hz

Cooling Data

Coil Type:..... Cold Fluid Cooling
Coil Rows:..... 3 Rows
Fluid Type:..... Fresh Water
Total Capacity:..... 13877 BTU/hr
Sensible Capacity:..... 9924 BTU/hr
Entering Air Dry Bulb Temperature:..... 80.0 F
Entering Air Wet Bulb Temperature:..... 67.0 F
Leaving Air Dry Bulb Temperature:..... 57.3 F
Leaving Air Wet Bulb Temperature:..... 55.9 F
Fluid Flow Rate:..... 2.3 gpm
Fluid Pressure Drop:..... 26.37 ft wg
Fluid Entering Temperature:..... 44.0 F
Fluid Leaving Temperature:..... 56.0 F

Heating Data

Coil Type:..... Hot Fluid Heating
Coil Rows:..... 1 Row
Fluid Type:..... Fresh Water
Sensible Capacity:..... 21020 BTU/hr
Entering Air Temperature:..... 60.0 F
Leaving Air Temperature:..... 108.1 F
Fluid Flow Rate:..... 2.1 gpm
Fluid Pressure Drop:..... 5.46 ft wg
Fluid Entering Temperature:..... 180.0 F
Fluid Leaving Temperature:..... 160.0 F

Electrical Data

Motor Voltage:..... 208-1-60 V-Ph-Hz
Motor Nominal HP:..... 1/20 hp
Total Motor Watts:..... 114
Total Motor Amps:..... 0.6

Acoustical Data

N/A
Sound Power 125 dB:..... 69
Sound Power 250 dB:..... 59.5
Sound Power 500 dB:..... 55.5
Sound Power 1000 dB:..... 50.5
Sound Power 2000 dB:..... 41.5

Performance Summary For FCU-2

Project: Nathan- Thesis Project FCUs
Prepared By:

03/29/2006
03:56PM

Sound Power 4000 dB:..... **39.5**
Sound Power 8000 dB:..... **36.5**
Sound A Weight in dB: **58**

Factory-Installed Options

Coil Connections: **Same end**
Return:..... **Front Return**
Supply: **Front Supply**
Filters:..... **1 in. Throwaway Glass-Fiber**
Drain Pans:..... **Standard Main Drain Pan**
Return Air Options: **Bar Type Alum Finish (#3)**
Cabinet Size: **Standard Cabinet Size (17 in.)**
Cabinet Height:..... **Std.**
AAV / Drains:..... **Manual Air Vents only**
Control Packages: **Field Supplied/Inst Remote-Mtd Therm**
Single Power Source: **No**
Riser Chase:..... **Full Riser Chase**
Riser Piping Order: **Std.**



Project Name: PSU Arch Project

Line #: 1 Tag:

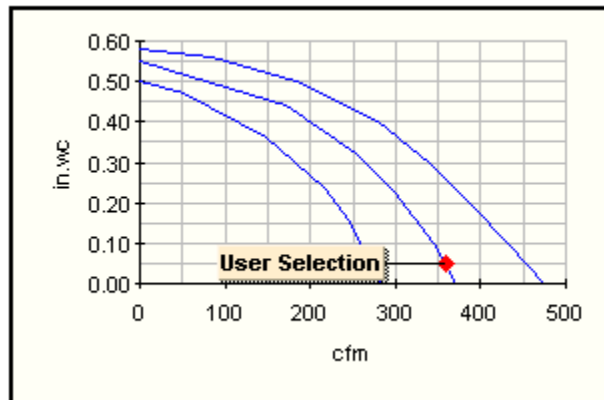
Date: 3/30/2006 8:45:34 AM ET Selection Version: 1.0.7

Selection Method: Fixed ESP/Nominal Airflow Elevation: 0 ft.

Notes:

General												
Mfg	Model	Unit Size	Airflow (cfm)	ESP (in.wc)	Motor (Hp)	Motor RPM	Fan Amps	Fan Watts	Fan Qty	V/P/Hz	Motor Speed	Weight* (lb)
Enviro-Tec	VHC	04	358	0.05	(1) 1/25	800	1	118	1	115/1/60	Medium	254

* Weight does not include accessories.



Fan selection and performance is shown at elevation of 0 ft.

Chilled Water Coil												
EAT DB/WB (deg.F)	LAT DB/WB (deg.F)	Total Capacity (Btuh)	Sensible Capacity (Btuh)	EWT/LWT (deg.F)	Fluid Flow (gpm)	Fluid PD (ft.)	Air PD (in.wc)	Coil Rows	Coil FPI	No. Circuits	Fin Material	Tube Wall
75 / 63	55.2 / 53.4	9992	7688	44 / 56	1.66	4.38	0.08	3	14	2	0.0055 in. Al	0.016 in.

Hot Water Coil												
EAT DB (deg.F)	LAT DB (deg.F)	Sensible Capacity (Btuh)	EWT/LWT (deg.F)	Fluid Flow (gpm)	Fluid PD (ft.)	Air PD (in.wc)	Coil Rows	Coil FPI	No. Circuits	Fin Material	Tube Wall	
70	123.2	20630	180 / 160	2.12	11.07	0.02	1	14	1	0.0055 in. Al	0.016 in.	

Sound Power By Octave Band (dB Re 10 ⁻¹² Watts)							
Band	2	3	4	5	6	7	8
Frequency	125	250	500	1000	2000	4000	8000
Total	52	45	42	36	35	27	27

- Unit data is certified in accordance with ARI 440.
- Coils are manufactured in accordance with ARI 410.
- Sound data tested in accordance with ARI 350-2000.
 - Total sound power level data based on Model VHC with fan CFM at corresponding motor tap with 115/1/60 volt motor, 4 row coil, 1" throwaway filter, 0.05" external static pressure and standard rated internal pressure losses.
- Unit pressure drop and CFM based upon dry coil as required by ARI 440.
- Scheduled motor information is for Hi Speed.
- The coil selection has been made at Standard conditions.
- Outside Airflow is a user input value for scheduling purposes.



Project Name: PSU Arch Project

Line #: 2 Tag: FCU-2

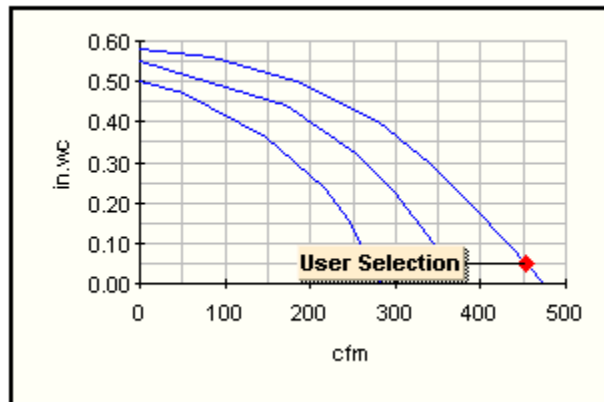
Date: 3/30/2006 8:46:32 AM ET Selection Version: 1.0.7

Selection Method: Fixed ESP/Nominal Airflow Elevation: 0 ft.

Notes:

General												
Mfg	Model	Unit Size	Airflow (cfm)	ESP (in.wc)	Motor (Hp)	Motor RPM	Fan Amps	Fan Watts	Fan Qty	V/P/Hz	Motor Speed	Weight* (lb)
Enviro-Tec	VHC	04	454	0.05	(1) 1/25	800	1	118	1	115/1/60	High	254

* Weight does not include accessories.



Fan selection and performance is shown at elevation of 0 ft.

Chilled Water Coil												
EAT DB/WB (deg.F)	LAT DB/WB (deg.F)	Total Capacity (Btuh)	Sensible Capacity (Btuh)	EWT/LWT (deg.F)	Fluid Flow (gpm)	Fluid PD (ft.)	Air PD (in.wc)	Coil Rows	Coil FPI	No. Circuits	Fin Material	Tube Wall
75 / 63	56.2 / 54.1	11854	9263	44 / 56	1.97	5.43	0.12	3	14	2	0.0055 in. Al	0.016 in.

Hot Water Coil												
EAT DB (deg.F)	LAT DB (deg.F)	Sensible Capacity (Btuh)	EWT/LWT (deg.F)	Fluid Flow (gpm)	Fluid PD (ft.)	Air PD (in.wc)	Coil Rows	Coil FPI	No. Circuits	Fin Material	Tube Wall	
70	119.7	24423	180 / 160	2.5	15.31	0.02	1	14	1	0.0055 in. Al	0.016 in.	

Sound Power By Octave Band (dB Re 10 ⁻¹² Watts)							
Band	2	3	4	5	6	7	8
Frequency	125	250	500	1000	2000	4000	8000
Total	57	49	47	40	36	30	27

- Unit data is certified in accordance with ARI 440.
- Coils are manufactured in accordance with ARI 410.
- Sound data tested in accordance with ARI 350-2000.
 - Total sound power level data based on Model VHC with fan CFM at corresponding motor tap with 115/1/60 volt motor, 4 row coil, 1" throwaway filter, 0.05" external static pressure and standard rated internal pressure losses.
- Unit pressure drop and CFM based upon dry coil as required by ARI 440.
- Scheduled motor information is for Hi Speed.
- The coil selection has been made at Standard conditions.
- Outside Airflow is a user input value for scheduling purposes.