

Project Information

For: Busy Bee Warehouse
Lake City, FL

		Htg	Clg			Htg	Clg
Outside db	(°F)	33	92	Inside db	(°F)	70	74
Outside RH	(%)	-	48	Inside RH	(%)	-	50
Outside wb	(°F)	-	76	Inside wb	(°F)	-	62
Daily range	(°F)	-	18	Design TD	(°F)	37	18
Moisture diff.	(gr/lb)	-	46				

Heating Equipment

Make	Trane	
Model	4TWR6060N1	
Type	Split ASHP	
Efficiency	8 HSPF2	
Heating Input		
Heating Output	60.0	MBtuh @ 47°F
Humidifier	15.3	gpd
Leaving Air Temp	101.6	°F
Actual Heating Fan	1733	cfm

Cooling Equipment

Make	Trane	
Model	4TWR6060N1	
Type	Split ASHP	
COP / EER / SEER	15.0	
Sensible Cooling	48.0	MBtuh
Latent Cooling	12.0	MBtuh
Total Cooling	60.0	MBtuh
Leaving Air Temp	55.0	°F
Actual Cooling Fan	1733	cfm

Equipment Location	Unit 1
System Type	PEAKCV
Fan Motor Heat Type	PACKAGE
Fan & Motor Combined Efficiency	0 %
Static Pressure Across Fan	0 in H2O

NAME	Area ft²	Heat Loss	Sensible Gain	Latent Gain	Htg cfm	Clg cfm	Time
Section 1	2257	36265	42586	5087	1733	1733	Jul 1700 LDT
Unit 1	2257	36265	42586	5087	1733	1733	Jul 1700 LDT

Project Information

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Lake City, FL

		Htg	Clg
Outside db	(°F)	33	92
Outside RH	(%)	-	48
Outside wb	(°F)	-	76
Daily range	(°F)	-	18
Moisture diff.	(gr/lb)	-	46

		Htg	Clg
Inside db	(°F)	70	74
Inside RH	(%)	-	50
Inside wb	(°F)	-	62
Design TD	(°F)	37	18

Heating Equipment

Make	Trane		
Model	4TWR6060N1		
Type	Split ASHP		
Efficiency	8 HSPF2		
Heating Input			
Heating Output	60.0	MBtuh @ 47°F	
Humidifier	15.6	gpd	
Leaving Air Temp	101.6	°F	
Actual Heating Fan	1733	cfm	

Cooling Equipment

Make	Trane		
Model	4TWR6060N1		
Type	Split ASHP		
COP / EER / SEER	15.0		
Sensible Cooling	48.0	MBtuh	
Latent Cooling	12.0	MBtuh	
Total Cooling	60.0	MBtuh	
Leaving Air Temp	55.0	°F	
Actual Cooling Fan	1733	cfm	

Equipment Location	Unit 2
System Type	PEAKCV
Fan Motor Heat Type	PACKAGE
Fan & Motor Combined Efficiency	0 %
Static Pressure Across Fan	0 in H2O

NAME	Area ft²	Heat Loss	Sensible Gain	Latent Gain	Htg cfm	Clg cfm	Time
Section 2	2294	36798	43334	5170	1733	1733	Jul 1700 LDT
Unit 2	2294	36798	43334	5170	1733	1733	Jul 1700 LDT

Project Information

For: Busy Bee Warehouse
Lake City, FL

		Htg	Clg			Htg	Clg
Outside db	(°F)	33	92	Inside db	(°F)	70	74
Outside RH	(%)	-	48	Inside RH	(%)	-	50
Outside wb	(°F)	-	76	Inside wb	(°F)	-	62
Daily range	(°F)	-	18	Design TD	(°F)	37	18
Moisture diff.	(gr/lb)	-	46				

Heating Equipment

Make	Trane	
Model	4TWR6060N1	
Type	Split ASHP	
Efficiency	8 HSPF2	
Heating Input		
Heating Output	60.0	MBtuh @ 47°F
Humidifier	15.6	gpd
Leaving Air Temp	101.6	°F
Actual Heating Fan	1733	cfm

Cooling Equipment

Make	Trane	
Model	4TWR6060N1	
Type	Split ASHP	
COP / EER / SEER	15.0	
Sensible Cooling	48.0	MBtuh
Latent Cooling	12.0	MBtuh
Total Cooling	60.0	MBtuh
Leaving Air Temp	55.0	°F
Actual Cooling Fan	1733	cfm

Equipment Location	Unit 3
System Type	PEAKCV
Fan Motor Heat Type	PACKAGE
Fan & Motor Combined Efficiency	0 %
Static Pressure Across Fan	0 in H2O

NAME	Area ft²	Heat Loss	Sensible Gain	Latent Gain	Htg cfm	Clg cfm	Time
Section 3	2294	36798	43334	5170	1733	1733	Jul 1700 LDT
Unit 3	2294	36798	43334	5170	1733	1733	Jul 1700 LDT

Project Information

For: Busy Bee Warehouse
Lake City, FL

		Htg	Clg			Htg	Clg
Outside db	(°F)	33	92	Inside db	(°F)	70	74
Outside RH	(%)	-	48	Inside RH	(%)	-	50
Outside wb	(°F)	-	76	Inside wb	(°F)	-	62
Daily range	(°F)	-	18	Design TD	(°F)	37	18
Moisture diff.	(gr/lb)	-	46				

Heating Equipment

Make	Trane	
Model	4TWR6060N1	
Type	Split ASHP	
Efficiency	8 HSPF2	
Heating Input		
Heating Output	60.0	MBtuh @ 47°F
Humidifier	15.7	gpd
Leaving Air Temp	101.6	°F
Actual Heating Fan	1733	cfm

Cooling Equipment

Make	Trane	
Model	4TWR6060N1	
Type	Split ASHP	
COP / EER / SEER	15.0	
Sensible Cooling	48.0	MBtuh
Latent Cooling	12.0	MBtuh
Total Cooling	60.0	MBtuh
Leaving Air Temp	55.0	°F
Actual Cooling Fan	1733	cfm

Equipment Location	Unit 4
System Type	PEAKCV
Fan Motor Heat Type	PACKAGE
Fan & Motor Combined Efficiency	0 %
Static Pressure Across Fan	0 in H2O

NAME	Area ft²	Heat Loss	Sensible Gain	Latent Gain	Htg cfm	Clg cfm	Time
Section 4	2213	34160	42439	4987	1548	1662	Jul 1700 LDT
RR	81	3415	2051	288	185	71	Jul 1700 LDT
Unit 4	2294	37575	44490	5276	1733	1733	Jul 1700 LDT

Project Information

For: Busy Bee Warehouse
Lake City, FL

Zone: Unit 1

COOLING LOAD

1. DESIGN CONDITIONS		at Jul 1700 LDT	Peak load at Jul 1700 LDT		
Inside:	74 °F	Outside:	92 °F	TD:	18 °F
OutRH:	48 %	MoistDiff:	45.9 gr/lb	Mult:	1.0
				Ins.wb	62 °F
				Sensible	Latent
2. SOLAR RADIATION THROUGH GLASS				0	-
3. TRANSMISSION GAINS		Sensible		12000	-
Walls:		5770		-	-
Glass:		0		-	-
Doors:		43		-	-
Partitions:		0		-	-
Floors:		0		-	-
Ceilings:		6187		-	-
4. INTERNAL HEAT GAIN		Sensible		Latent	24933
Occupants:		1382		875	-
Lights:		23134		-	-
Motors:		0		-	-
Appliances:		416		0	-
5. INFILTRATION:		Outside air cfm:		0	0
6. SUBTOTAL:	Space load	Sensible		Latent	36932
Envelope		36932		875	-
Less external		0		-	-
Redistribution		0		0	-
7. SUPPLY DUCT					1847
8. SUBTOTAL:	Space load + supply duct				38779
Actual cfm:		1733	at supply TD:	19	-
9. VENTILATION:		Make-up air cfm:		135	2699
10. RETURN AIR LOAD:		Lighting + plenum (net)			4212
11. RETURN DUCT					0
12. TOTAL LOADS ON EQUIPMENT					1108
					42586
					5087

HEATING LOAD

13. DESIGN CONDITIONS			Mult:	1.0	
Inside:	70 °F	Outside:	33 °F	TD:	37 °F
14. TRANSMISSION LOSSES					15039
Walls:		7189			-
Glass:		0			-
Doors:		98			-
Partitions:		0			-
Floors:		4913			-
Ceilings:		2839			-
15. INFILTRATION:		Outside air cfm:		203	8186
16. SUBTOTAL:	Space load				23225
Envelope		23225			-
Less external		0			-
Less transfer		0			-
Redistribution		0			-
17. SUPPLY DUCT:					1161
18. VENTILATION:		Make-up air cfm:		135	5457
19. HUMIDIFICATION					5724
Piping					0
20. RETURN DUCT					697
21. TOTAL HEATING LOAD ON EQUIPMENT					36265

Project Information

For: Busy Bee Warehouse
Lake City, FL

Zone: Unit 2

COOLING LOAD

1. DESIGN CONDITIONS		at Jul 1700 LDT	Peak load at Jul 1700 LDT		
Inside:	74 °F	Outside:	92 °F	TD:	18 °F
OutRH:	48 %	MoistDiff:	45.9 gr/lb	Mult:	1.0
				Ins.wb	62 °F
				Sensible	Latent
2. SOLAR RADIATION THROUGH GLASS				0	-
3. TRANSMISSION GAINS		Sensible		12249	-
Walls:		2766		-	-
Glass:		0		-	-
Doors:		3195		-	-
Partitions:		0		-	-
Floors:		0		-	-
Ceilings:		6288		-	-
4. INTERNAL HEAT GAIN		Sensible		25335	889
Occupants:		1405		889	-
Lights:		23513		-	-
Motors:		0		-	-
Appliances:		416		0	-
5. INFILTRATION:		Outside air cfm:		0	0
6. SUBTOTAL:	Space load	Sensible		37584	889
Envelope		37584		889	-
Less external		0		-	-
Redistribution		0		0	-
7. SUPPLY DUCT				1879	-
8. SUBTOTAL:	Space load + supply duct			39463	-
Actual cfm:		1733	at supply TD:	19	-
9. VENTILATION:		Make-up air cfm:		138	2743
10. RETURN AIR LOAD:		Lighting + plenum (net)		0	4281
11. RETURN DUCT				1128	-
12. TOTAL LOADS ON EQUIPMENT				43334	5170

HEATING LOAD

13. DESIGN CONDITIONS			Mult:	1.0	
Inside:	70 °F	Outside:	33 °F	TD:	37 °F
14. TRANSMISSION LOSSES					15229
Walls:		2829		-	-
Glass:		0		-	-
Doors:		7258		-	-
Partitions:		0		-	-
Floors:		2257		-	-
Ceilings:		2885		-	-
15. INFILTRATION:		Outside air cfm:		206	8320
16. SUBTOTAL:	Space load				23550
Envelope		23550		-	-
Less external		0		-	-
Less transfer		0		-	-
Redistribution		0		-	-
17. SUPPLY DUCT:					1177
18. VENTILATION:		Make-up air cfm:		138	5547
19. HUMIDIFICATION					5817
Piping					0
20. RETURN DUCT					706
21. TOTAL HEATING LOAD ON EQUIPMENT					36798

Project Information

For: Busy Bee Warehouse
Lake City, FL

Zone: Unit 3

COOLING LOAD

1. DESIGN CONDITIONS		at Jul 1700 LDT	Peak load at Jul 1700 LDT		
Inside:	74 °F	Outside:	92 °F	TD:	18 °F
OutRH:	48 %	MoistDiff:	45.9 gr/lb	Mult:	1.0
				Ins.wb	62 °F
				Sensible	Latent
2. SOLAR RADIATION THROUGH GLASS				0	-
3. TRANSMISSION GAINS		Sensible		12249	-
Walls:		2766		-	-
Glass:		0		-	-
Doors:		3195		-	-
Partitions:		0		-	-
Floors:		0		-	-
Ceilings:		6288		-	-
4. INTERNAL HEAT GAIN		Sensible		Latent	25335
Occupants:		1405		889	-
Lights:		23513		-	-
Motors:		0		-	-
Appliances:		416		0	-
5. INFILTRATION:		Outside air cfm:		0	0
6. SUBTOTAL:	Space load	Sensible		Latent	37584
Envelope		37584		889	-
Less external		0		-	-
Redistribution		0		0	-
7. SUPPLY DUCT					1879
8. SUBTOTAL:	Space load + supply duct				39463
Actual cfm:		1733	at supply TD:	19	-
9. VENTILATION:		Make-up air cfm:		138	2743
10. RETURN AIR LOAD:		Lighting + plenum (net)			4281
11. RETURN DUCT					0
12. TOTAL LOADS ON EQUIPMENT					1128
					43334
					5170

HEATING LOAD

13. DESIGN CONDITIONS			Mult:	1.0	
Inside:	70 °F	Outside:	33 °F	TD:	37 °F
14. TRANSMISSION LOSSES					15229
Walls:		2829			-
Glass:		0			-
Doors:		7258			-
Partitions:		0			-
Floors:		2257			-
Ceilings:		2885			-
15. INFILTRATION:		Outside air cfm:		206	8320
16. SUBTOTAL:	Space load				23550
Envelope		23550			-
Less external		0			-
Less transfer		0			-
Redistribution		0			-
17. SUPPLY DUCT:					1177
18. VENTILATION:		Make-up air cfm:		138	5547
19. HUMIDIFICATION					5817
Piping					0
20. RETURN DUCT					706
21. TOTAL HEATING LOAD ON EQUIPMENT					36798

Project Information

For: Busy Bee Warehouse
Lake City, FL

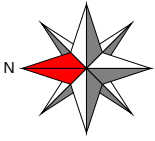
Zone: Unit 4

COOLING LOAD

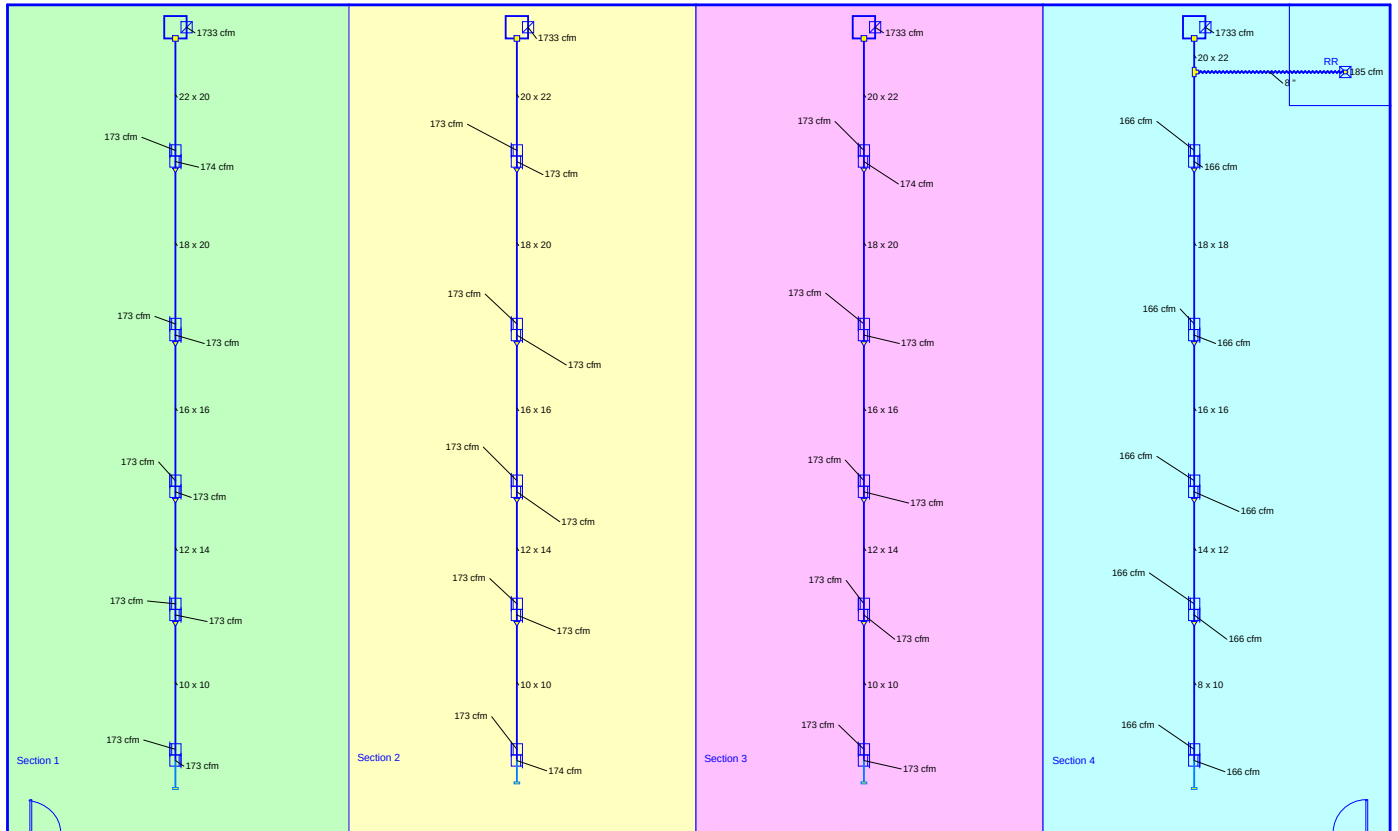
1. DESIGN CONDITIONS		at Jul 1700 LDT	Peak load at Jul 1700 LDT		
Inside:	74 °F	Outside:	92 °F	TD:	18 °F
OutRH:	48 %	MoistDiff:	45.9 gr/lb	Mult:	1.0
				Ins.wb	62 °F
				Sensible	Latent
2. SOLAR RADIATION THROUGH GLASS				0	-
3. TRANSMISSION GAINS		Sensible		13462	-
Walls:		7181		-	-
Glass:		0		-	-
Doors:		43		-	-
Partitions:		0		-	-
Floors:		0		-	-
Ceilings:		6238		-	-
4. INTERNAL HEAT GAIN		Sensible		Latent	24455
Occupants:		1355		858	-
Lights:		22683		-	-
Motors:		0		-	-
Appliances:		416		0	-
5. INFILTRATION:		Outside air cfm:		10	183
6. SUBTOTAL:	Space load	Sensible		Latent	38100
Envelope		38100		1146	-
Less external		0		-	-
Redistribution		0		0	-
7. SUPPLY DUCT					2236
8. SUBTOTAL:	Space load + supply duct				40336
Actual cfm:		1733	at supply TD:	19	-
9. VENTILATION:		Make-up air cfm:		133	2646
10. RETURN AIR LOAD:		Lighting + plenum (net)			0
11. RETURN DUCT					1508
12. TOTAL LOADS ON EQUIPMENT					44490
					5276

HEATING LOAD

13. DESIGN CONDITIONS			Mult:	1.0	
Inside:	70 °F	Outside:	33 °F	TD:	37 °F
14. TRANSMISSION LOSSES					15434
Walls:		7523			-
Glass:		0			-
Doors:		98			-
Partitions:		0			-
Floors:		4950			-
Ceilings:		2863			-
15. INFILTRATION:		Outside air cfm:		214	8614
16. SUBTOTAL:	Space load				24048
Envelope		24048			-
Less external		0			-
Less transfer		0			-
Redistribution		0			-
17. SUPPLY DUCT:					1466
18. VENTILATION:		Make-up air cfm:		133	5351
19. HUMIDIFICATION					5858
Piping					0
20. RETURN DUCT					851
21. TOTAL HEATING LOAD ON EQUIPMENT					37575



Busy Bee Warehouse



Job #: J-9448 - C-1309
Performed by David Brown for:
Busy Bee Warehouse

Lake City, FL

Scale: 1 : 206

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Project Information

For: Busy Bee Warehouse
Lake City, FL

	Heating	Cooling
External static pressure	0.53 in H ₂ O	0.53 in H ₂ O
Pressure losses	0 in H ₂ O	0 in H ₂ O
Available static pressure	0.53 in H ₂ O	0.53 in H ₂ O
Supply / return available pressure	0.265 / 0.265 in H ₂ O	0.265 / 0.265 in H ₂ O
Lowest friction rate	0.380 in/100ft	0.380 in/100ft
Actual air flow	1733 cfm	1733 cfm
Total effective length (TEL)	140 ft	

Supply Branch Detail Table

Name	Design (Btuh)	Htg (cfm)	Clg (cfm)	Design FR	Diam (in)	H x W (in)	Duct Matl	Actual Ln (ft)	Ftg.Eqv Ln (ft)	Trunk
Section 1	c 3886	174	174	1.152	8.0	0x0	VIFx	11.0	35.0	st4
Section 1-A	c 2323	173	173	0.741	8.0	0x0	VIFx	26.5	45.0	st4A
Section 1-B	c 2323	173	173	0.555	8.0	0x0	RtFg	40.5	55.0	st4B
Section 1-C	c 2323	173	173	0.455	8.0	0x0	RtFg	51.5	65.0	st4C
Section 1-D	c 2323	173	173	0.380	8.0	0x0	VIFx	64.5	75.0	st4D
Section 1-E	c 2323	173	173	0.459	8.0	0x0	VIFx	50.5	65.0	st4C
Section 1-F	c 2323	173	173	0.383	5.8	10x6	RtFg	63.5	75.0	st4D
Section 1-G	c 2323	173	173	0.561	8.0	0x0	VIFx	39.5	55.0	st4B
Section 1-H	c 2323	173	173	0.752	8.0	0x0	RtFg	25.5	45.0	st4A
Section 1-I	c 2323	173	173	1.178	8.0	0x0	VIFx	10.0	35.0	st4

Supply Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
st4D	Peak AVF	347	347	0.380	499	7.5	10 x 10	RectFbg	st4C
st4A	Peak AVF	1386	1386	0.380	554	12.5	20 x 18	RectFbg	st4
st4	Peak AVF	1733	1733	0.380	567	13.6	20 x 22	RectFbg	
st4B	Peak AVF	1040	1040	0.380	585	11.3	16 x 16	RectFbg	st4A
st4C	Peak AVF	693	693	0.380	594	9.7	14 x 12	RectFbg	st4B

Return Branch Detail Table

Name	Grille Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb2	0x 0	1733	1733	0	0	0	0	0x 0		VIFx	

Project Information

For: Busy Bee Warehouse
Lake City, FL

	Heating	Cooling
External static pressure	0.53 in H ₂ O	0.53 in H ₂ O
Pressure losses	0 in H ₂ O	0 in H ₂ O
Available static pressure	0.53 in H ₂ O	0.53 in H ₂ O
Supply / return available pressure	0.265 / 0.265 in H ₂ O	0.265 / 0.265 in H ₂ O
Lowest friction rate	0.380 in/100ft	0.380 in/100ft
Actual air flow	1733 cfm	1733 cfm
Total effective length (TEL)	140 ft	

Supply Branch Detail Table

Name	Design (Btuh)	Htg (cfm)	Clg (cfm)	Design FR	Diam (in)	H x W (in)	Duct Matl	Actual Ln (ft)	Ftg.Eqv Ln (ft)	Trunk
Section 2	h 2363	174	173	0.380	8.0	0x0	VIFx	64.5	75.0	st3D
Section 2-A	c 3946	173	173	0.455	8.0	0x0	VIFx	51.5	65.0	st3C
Section 2-B	c 3946	173	173	0.555	8.0	0x0	VIFx	40.5	55.0	st3B
Section 2-C	c 3946	173	173	0.741	8.0	0x0	VIFx	26.5	45.0	st3A
Section 2-D	c 3946	173	173	1.152	8.0	0x0	VIFx	11.0	35.0	st3
Section 2-E	c 3946	173	173	0.383	8.0	0x0	VIFx	63.5	75.0	st3D
Section 2-F	c 3946	173	173	0.459	8.0	0x0	VIFx	50.5	65.0	st3C
Section 2-G	c 3946	173	173	0.561	8.0	0x0	VIFx	39.5	55.0	st3B
Section 2-H	c 3946	173	173	0.752	8.0	0x0	VIFx	25.5	45.0	st3A
Section 2-I	c 3946	173	173	1.178	8.0	0x0	VIFx	10.0	35.0	st3

Supply Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
st3D	Peak AVF	347	347	0.380	500	7.5	10 x 10	RectFbg	st3C
st3C	Peak AVF	694	693	0.380	594	9.7	14 x 12	RectFbg	st3B
st3B	Peak AVF	1040	1040	0.380	585	11.3	16 x 16	RectFbg	st3A
st3A	Peak AVF	1387	1386	0.380	555	12.5	20 x 18	RectFbg	st3
st3	Peak AVF	1733	1733	0.380	567	13.6	22 x 20	RectFbg	

Return Branch Detail Table

Name	Grille Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb3	0x 0	1733	1733	0	0	0	0	0x 0		VIFx	

Project Information

For: Busy Bee Warehouse
Lake City, FL

	Heating	Cooling
External static pressure	0.53 in H ₂ O	0.53 in H ₂ O
Pressure losses	0 in H ₂ O	0 in H ₂ O
Available static pressure	0.53 in H ₂ O	0.53 in H ₂ O
Supply / return available pressure	0.265 / 0.265 in H ₂ O	0.265 / 0.265 in H ₂ O
Lowest friction rate	0.380 in/100ft	0.380 in/100ft
Actual air flow	1733 cfm	1733 cfm
Total effective length (TEL)	140 ft	

Supply Branch Detail Table

Name	Design (Btuh)	Htg (cfm)	Clg (cfm)	Design FR	Diam (in)	H x W (in)	Duct Matl	Actual Ln (ft)	Ftg.Eqv Ln (ft)	Trunk
Section 3	h 2363	174	173	1.152	8.0	0x0	VIFx	11.0	35.0	st2
Section 3-A	c 3946	173	173	0.741	8.0	0x0	VIFx	26.5	45.0	st2A
Section 3-B	c 3946	173	173	0.555	8.0	0x0	VIFx	40.5	55.0	st2B
Section 3-C	c 3946	173	173	0.455	8.0	0x0	VIFx	51.5	65.0	st2C
Section 3-D	c 3946	173	173	0.380	8.0	0x0	VIFx	64.5	75.0	st2D
Section 3-E	c 3946	173	173	0.383	8.0	0x0	VIFx	63.5	75.0	st2D
Section 3-F	c 3946	173	173	0.459	8.0	0x0	VIFx	50.5	65.0	st2C
Section 3-G	c 3946	173	173	0.561	8.0	0x0	VIFx	39.5	55.0	st2B
Section 3-H	c 3946	173	173	0.752	8.0	0x0	VIFx	25.5	45.0	st2A
Section 3-I	c 3946	173	173	1.178	8.0	0x0	VIFx	10.0	35.0	st2

Supply Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
st2A	Peak AVF	1386	1386	0.380	555	12.5	20 x 18	RectFbg	st2
st2	Peak AVF	1733	1733	0.380	567	13.6	22 x 20	RectFbg	
st2B	Peak AVF	1039	1040	0.380	585	11.3	16 x 16	RectFbg	st2A
st2C	Peak AVF	693	693	0.380	594	9.7	14 x 12	RectFbg	st2B
st2D	Peak AVF	346	347	0.380	499	7.5	10 x 10	RectFbg	st2C

Return Branch Detail Table

Name	Grille Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb4	0x 0	1733	1733	0	0	0	0	0x 0		VIFx	

Project Information

For: Busy Bee Warehouse
Lake City, FL

	Heating	Cooling
External static pressure	0.53 in H ₂ O	0.53 in H ₂ O
Pressure losses	0 in H ₂ O	0 in H ₂ O
Available static pressure	0.53 in H ₂ O	0.53 in H ₂ O
Supply / return available pressure	0.265 / 0.265 in H ₂ O	0.265 / 0.265 in H ₂ O
Lowest friction rate	0.375 in/100ft	0.375 in/100ft
Actual air flow	1733 cfm	1733 cfm
Total effective length (TEL)	142 ft	

Supply Branch Detail Table

Name	Design (Btuh)	Htg (cfm)	Clg (cfm)	Design FR	Diam (in)	H x W (in)	Duct Matl	Actual Ln (ft)	Ftg.Eqv Ln (ft)	Trunk
RR	h 2569	185	71	0.375	8.0	0x0	VIFx	16.5	125.0	st1
Section 4	c 3874	155	166	0.380	8.0	0x0	VIFx	64.5	75.0	st1D
Section 4-A	c 3869	155	166	0.455	8.0	0x0	VIFx	51.5	65.0	st1C
Section 4-B	c 3869	155	166	0.555	8.0	0x0	VIFx	40.5	55.0	st1B
Section 4-C	c 3869	155	166	0.741	8.0	0x0	VIFx	26.5	45.0	st1A
Section 4-D	c 3869	155	166	1.152	8.0	0x0	VIFx	11.0	35.0	st1
Section 4-E	c 3869	155	166	0.383	8.0	0x0	VIFx	63.5	75.0	st1D
Section 4-F	c 3869	155	166	0.459	8.0	0x0	VIFx	50.5	65.0	st1C
Section 4-G	c 3869	155	166	0.561	8.0	0x0	VIFx	39.5	55.0	st1B
Section 4-H	c 3869	155	166	0.752	8.0	0x0	VIFx	25.5	45.0	st1A
Section 4-I	c 3869	155	166	1.178	8.0	0x0	VIFx	10.0	35.0	st1

Supply Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
st1	Peak AVF	1733	1733	0.375	567	13.7	22 x 20	RectFbg	
st1A	Peak AVF	1238	1330	0.380	591	12.3	18 x 18	RectFbg	st1
st1B	Peak AVF	929	997	0.380	561	11.1	16 x 16	RectFbg	st1A
st1C	Peak AVF	619	665	0.380	570	9.5	12 x 14	RectFbg	st1B
st1D	Peak AVF	310	333	0.380	599	7.4	10 x 8	RectFbg	st1C

Return Branch Detail Table

Name	Grille Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb5	0x 0	1733	1733	0	0	0	0	0x 0		VIFx	