



Right-Suite® Universal 2024 Short Form

System #1

New Age Dimensions, L.L.C.

Job: Trinity Faith Outreach M...
Date: 08/19/2024
By: John PirkI
Plan: Manual N and D

14080 S.E. 122nd Lane Road, Ocklawaha, FL 32179 Phone: (352) 288 - 0686 Fax: (352) 288 - 0684 Email: john.newage@gmail.com Web: www.newagedimensions.webs.com

Project Information

For: Trinity Faith Outreach Ministries
304 S.W. Kicklighter Terrace, Lake City, FL 32024
Phone: (386) 697 - 4601

		Htg	Clg
Outside db	(°F)	33	91
Outside RH	(%)	-	49
Outside wb	(°F)	-	76
Daily range	(°F)	-	18
Moisture diff.	(gr/lb)	-	44

		Htg	Clg
Inside db	(°F)	70	75
Inside RH	(%)	-	50
Inside wb	(°F)	-	63
Design TD	(°F)	37	16

Heating Equipment

Make	Goodman Mfg.
Model	GSZB404210A
AHRI ref.	213368395
Type	Split ASHP
Efficiency	7.5 HSPF2
Heating Input	
Heating Output	39.5 MBtuh @ 47°F
Humidifier	13.6 gpd
Leaving Air Temp	95.8 °F
Actual Heating Fan	1400 cfm
Backup:	
Input = 10 kW, Output = 34121 Btuh, 100 AFUE	

Cooling Equipment

Make	Goodman Mfg.
Cond	GSZB404210A
Coil	AMST42CU1400B
AHRI ref.	213368395
Type	Split ASHP
Efficiency	12.0 EER2,14.5 SEER2
Sensible Cooling	28.0 MBtuh
Latent Cooling	12.0 MBtuh
Total Cooling	40.0 MBtuh
Leaving Air Temp	55.0 °F
Actual Cooling Fan	1400 cfm

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
Multipurpose	271	7260	6598	2001	426	338	Jul 1800 LDT
Corridor 1	125	2027	1992	401	125	107	Jul 1800 LDT
Sanctuary 1	650	13924	15388	6221	527	741	Jul 1800 LDT
Vestibule 1	85	1546	2762	571	115	155	Jul 1800 LDT
Womens RR	85	3702	1476	909	207	59	Jul 1800 LDT
System #1	1216	28459	28217	10104	1400	1400	Jul 1800 LDT





Right-Suite® Universal 2024 Short Form
System #2
New Age Dimensions, L.L.C.

Job: Trinity Faith Outreach M...
Date: 08/19/2024
By: John PirkI
Plan: Manual N and D

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Project Information

For: Trinity Faith Outreach Ministries
304 S.W. Kicklighter Terrace, Lake City, FL 32024
Phone: (386) 697 - 4601

Outside db	(°F)	Htg	Clg
Outside RH	(%)	33	91
Outside wb	(°F)	-	49
Daily range	(°F)	-	76
Moisture diff.	(gr/lb)	-	18
			44

Inside db	(°F)	Htg	Clg
Inside RH	(%)	70	75
Inside wb	(°F)	-	50
Design TD	(°F)	-	63
		37	16

Heating Equipment

Make	Goodman Mfg.
Model	GSZB404210A
AHRI ref.	213368395
Type	Split ASHP
Efficiency	7.5 HSPF2
Heating Input	
Heating Output	39.5 MBtuh @ 47°F
Humidifier	16.0 gpd
Leaving Air Temp	95.8 °F
Actual Heating Fan	1400 cfm
Backup:	
Input = 10 kW, Output = 34121 Btuh, 100 AFUE	

Cooling Equipment

Make	Goodman Mfg.
Cond	GSZB404210A
Coil	AMST42CU1400B
AHRI ref.	213368395
Type	Split ASHP
Efficiency	12.0 EER2, 14.5 SEER2
Sensible Cooling	28.0 MBtuh
Latent Cooling	12.0 MBtuh
Total Cooling	40.0 MBtuh
Leaving Air Temp	55.0 °F
Actual Cooling Fan	1400 cfm

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
Clerk Ofc	68	1633	2300	468	98	134	Jul 1800 LDT
Pastors Ofc	119	3384	3586	717	213	206	Jul 1800 LDT
RR #2	39	2250	806	818	70	22	Jul 1800 LDT
RR #1	41	1729	727	823	21	17	Jul 1800 LDT
Mens RR	85	3702	1473	909	197	64	Jul 1800 LDT
Sanctuary 2	650	13924	15378	6221	501	797	Jul 1800 LDT
Vestibule 2	85	2819	1027	507	191	58	Jul 1800 LDT
Corridor 2	98	1816	1740	352	110	101	Jul 1800 LDT
System #2	1184	31258	27038	10816	1400	1400	Jul 1800 LDT





Duct System Summary

System #1

New Age Dimensions, L.L.C.

Job: Trinity Faith Outreach M...
Date: 08/19/2024
By: John PirkI
Plan: Manual N and D

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Calculation method: EqualFric Supply FR (in/100ft): 0.880 Return FR (in/100ft): 0.880

Equipment pressure losses (in H2O):	Heating 0.090	Cooling 0.090
Duct system losses (in H2O):	13.603	13.571
Total fan pressure (in H2O):	13.693	13.661
Fan air flow (cfm):	1400	1400

Supply Branch Summary

Name	Htg Load (Btuh)	Clg Load (Btuh)	Design AVF (cfm)	Veloc (fpm)	Shape	Duct Size (in)	Duct Matl	Cumm. Loss (in H2O)
Corridor 1	1193	1808	h 125	637	Round	6	VinlFlx	6.255
Multipurpose	1354	1913	h 142	532	Round	7	VinlFlx	3.600
Multipurpose-A	1354	1913	h 142	532	Round	7	VinlFlx	1.809
Multipurpose-B	1354	1913	h 142	532	Round	7	VinlFlx	5.370
Sanctuary 1	837	2096	c 123	629	Round	6	VinlFlx	8.084
Sanctuary 1-A	837	2096	c 123	629	Round	6	VinlFlx	8.087
Sanctuary 1-B	837	2096	c 123	629	Round	6	VinlFlx	8.981
Sanctuary 1-C	837	2096	c 123	629	Round	6	VinlFlx	8.978
Sanctuary 1-D	837	2096	c 123	629	Round	6	VinlFlx	7.156
Sanctuary 1-E	837	2096	c 123	629	Round	6	VinlFlx	7.159
Vestibule 1	1095	2632	c 155	580	Round	7	VinlFlx	9.858
Womens RR	1970	1006	h 207	592	Round	8	VinlFlx	9.860

Supply Trunk Summary

Name	Htg Load (Btuh)	Clg Load (Btuh)	Design AVF (cfm)	Veloc (fpm)	Shape	Duct Size (in)	Duct Matl	Pres Loss (in H2O)
st1	13340	23760	c 1400	900	Rect	14 x 16	RectFbg	0.003
st3	11987	21847	c 1287	828	Rect	14 x 16	RectFbg	0.003
st4	11987	21847	c 1287	828	Rect	14 x 16	RectFbg	0.006
st5	10633	19934	c 1175	863	Rect	14 x 14	RectFbg	0.005
st6	10633	19934	c 1175	863	Rect	14 x 14	RectFbg	0.002
st7	9279	18020	c 1062	780	Rect	14 x 14	RectFbg	0.003
st8	8087	16213	c 955	819	Rect	12 x 14	RectFbg	0.012
st9	6413	12021	c 708	850	Rect	10 x 12	RectFbg	0.014
st10	4739	7829	h 497	895	Rect	8 x 10	RectFbg	0.023
st11	3065	3637	h 322	724	Rect	8 x 8	RectFbg	0.024

Return Branch Summary

Name	Htg Load (Btuh)	Clg Load (Btuh)	Design AVF (cfm)	Veloc (fpm)	Shape	Duct Size (in)	Duct Matl	Cumm. Loss (in H2O)
rb3	5254	7547	h 551	702	Round	12	VinlFlx	2.776
rb4	3065	3637	h 322	590	Round	10	VinlFlx	3.758
rb2	5021	12575	c 741	693	Round	14	VinlFlx	2.882

Return Trunk Summary

Name	Htg Load (Btuh)	Clg Load (Btuh)	Design AVF (cfm)	Veloc (fpm)	Shape	Duct Size (in)	Duct Matl	Pres Loss (in H2O)
rt3	13340	23760	c 1400	700	Rect	16 x 18	RectFbg	0.004
rt4	8087	16213	c 955	614	Rect	14 x 16	RectFbg	0.005
rt5	3065	3637	h 322	207	Rect	14 x 16	RectFbg	0.000
rt1	13340	23760	c 1400	700	Rect	16 x 18	RectFbg	0.013



Duct System Summary

System #2

New Age Dimensions, L.L.C.

Job: Trinity Faith Outreach M...

Date: 08/19/2024

By: John PirkI

Plan: Manual N and D

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Calculation method: EqualFric Supply FR (in/100ft): 0.880 Return FR (in/100ft): 0.880

Equipment pressure losses (in H2O): Heating Cooling
0.090 0.090
Duct system losses (in H2O): 15.268 15.184
Total fan pressure (in H2O): 15.358 15.274
Fan air flow (cfm): 1400 1400

Supply Branch Summary

Name	Htg Load (Btuh)	Clg Load (Btuh)	Design AVF (cfm)	Veloc (fpm)	Shape	Duct Size (in)	Duct Matl	Cumm. Loss (in H2O)
Clerk Ofc	980	2119	c 134	685	Round	6	VinFlx	1.828
Corridor 2	1107	1591	h 110	562	Round	6	VinFlx	7.126
Mens RR	1970	1003	h 197	563	Round	8	VinFlx	10.731
Pastors Ofc	2134	3253	h 213	610	Round	8	VinFlx	4.484
RR #1	212	274	h 21	242	Round	4	VinFlx	3.570
RR #2	698	346	h 70	511	Round	5	VinFlx	6.245
Sanctuary 2	837	2094	c 133	677	Round	6	VinFlx	8.942
Sanctuary 2-A	837	2094	c 133	677	Round	6	VinFlx	8.042
Sanctuary 2-B	837	2094	c 133	677	Round	6	VinFlx	8.040
Sanctuary 2-C	837	2094	c 133	677	Round	6	VinFlx	9.810
Sanctuary 2-D	837	2094	c 133	677	Round	6	VinFlx	8.940
Sanctuary 2-E	837	2094	c 133	677	Round	6	VinFlx	9.888
Vestibule 2	1911	917	h 191	546	Round	8	VinFlx	10.730

Supply Trunk Summary

Name	Htg Load (Btuh)	Clg Load (Btuh)	Design AVF (cfm)	Veloc (fpm)	Shape	Duct Size (in)	Duct Matl	Pres Loss (in H2O)
st17	10708	16423	h 1068	687	Rect	14 x 16	RectFbg	0.002
st18	10010	16077	c 1020	874	Rect	12 x 14	RectFbg	0.004
st16	10708	16423	h 1068	687	Rect	14 x 16	RectFbg	0.001
st15	12842	19676	h 1281	824	Rect	14 x 16	RectFbg	0.007
st2	14034	22069	h 1400	900	Rect	14 x 16	RectFbg	0.003
st13	13054	19950	h 1302	837	Rect	14 x 16	RectFbg	0.003
st14	13054	19950	h 1302	837	Rect	14 x 16	RectFbg	0.002
st19	8903	14485	c 919	788	Rect	12 x 14	RectFbg	0.011
st20	7229	10297	h 721	865	Rect	10 x 12	RectFbg	0.015
st21	5555	6109	h 554	798	Rect	10 x 10	RectFbg	0.016
st22	3882	1920	h 387	871	Rect	8 x 8	RectFbg	0.035



Return Branch Summary

Name	Htg Load (Btuh)	Clg Load (Btuh)	Design AVF (cfm)	Veloc (fpm)	Shape	Duct Size (in)	Duct Matl	Cumm. Loss (in H2O)
rb5	5021	12565	c 797	571	Round	16	VinlFlx	3.662
rb6	3882	1920	h 387	493	Round	12	VinlFlx	4.543
rb1	5131	7584	h 512	652	Round	12	VinlFlx	1.860

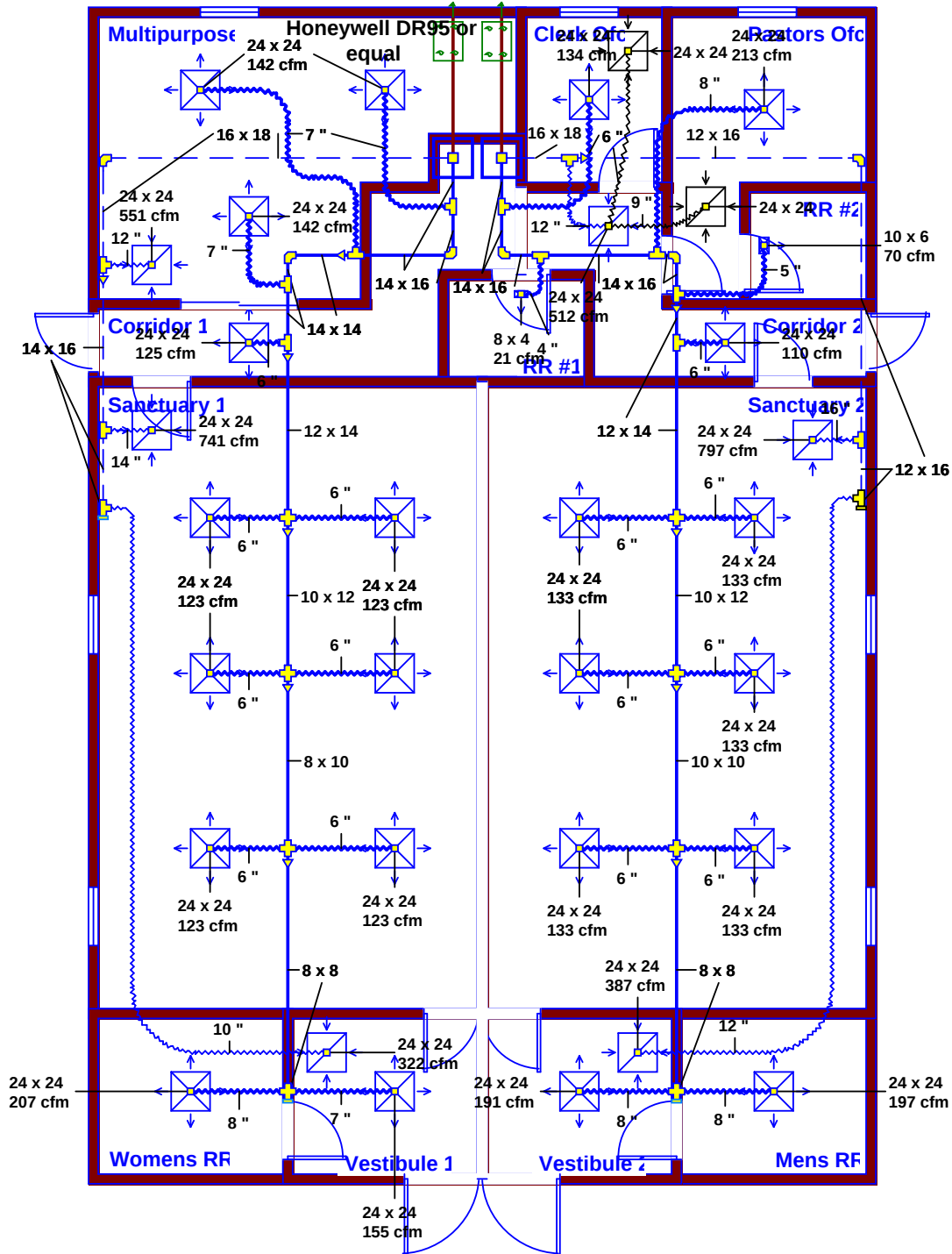
Return Trunk Summary

Name	Htg Load (Btuh)	Clg Load (Btuh)	Design AVF (cfm)	Veloc (fpm)	Shape	Duct Size (in)	Duct Matl	Pres Loss (in H2O)
rst7	14034	22069	h 1400	700	Rect	16 x 18	RectFbg	0.002
rst8	8903	14485	c 919	689	Rect	12 x 16	RectFbg	0.013
rst9	5131	7584	h 512	652	Round	12	VinlFlx	0.005
rst11	3882	1920	h 387	290	Rect	12 x 16	RectFbg	0.000
rst12	8903	14485	c 919	689	Rect	12 x 16	RectFbg	0.013



Sheet 1

Makeup/Fresh Air is
180cfm. 7". 12 X 6
soffit vent.



Makeup/Fresh Air was calculated as per FBC, Table 403.3.1.1. Occupancy
Classification Public spaces, Places of religious worship.

Job #: Trinity Faith Outreach Ministries
Performed by John PirkI for:

Trinity Faith Outreach Ministries
304 S.W. Kicklighter Terrace
Lake City, FL 32024
Phone: (386) 697 - 4601

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Scale: 1 : 104

Page 1
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