

Certificate of Product Ratings

AHRI Certified Reference Number : 202349385

Date : 05-10-2022

Model Status : Active

AHRI Type : HRCU-A-CB (Split System: Heat Pump with Remote Outdoor Unit-Air-Source)

Outdoor Unit Brand Name : YORK

Outdoor Unit Model Number (Condenser or Single Package) : YZF04214C

Indoor Unit Brand Name : ADP

Indoor Unit Model Number (Evaporator and/or Air Handler) : AV480CT

The manufacturer of this ADP product is responsible for the rating of this system combination.

Rated as follows in accordance with the latest edition of AHRI 210/240 - 2017 with Addendum 1, Performance Rating of Unitary Air-Conditioning & Air-Source Heat Pump Equipment and subject to rating accuracy by AHRI-sponsored, independent, third party testing:

Cooling Capacity (A2) - Single or High Stage (95F), btuh : 40000

SEER : 16.00

EER (A2) - Single or High Stage (95F) : 12.50

Heating Capacity (H12) - Single or High Stage (47F) : 40500

HSPF (Region IV) : 9.00

†"Active" Model Status are those that an AHRI Certification Program Participant is currently producing AND selling or offering for sale; OR new models that are being marketed but are not yet being produced. "Production Stopped" Model Status are those that an AHRI Certification Program Participant is no longer producing BUT is still selling or offering for sale.
Ratings that are accompanied by WAS indicate an involuntary re-rate. The new published rating is shown along with the previous (i.e. WAS) rating.

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CERTIFICATE VERIFICATION

The information for the model cited on this certificate can be verified at www.ahridirectory.org, click on "Verify Certificate" link and enter the AHRI Certified Reference Number and the date on which the certificate was issued, which is listed above, and the Certificate No., which is listed at bottom right.

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CERTIFICATE NO.:

132966586027909886



Load Short Form
Entire House
New Age Dimensions, LLC.

Job: Mitchell Residence
 Date: 5/4/2022
 By: Dakota Cross
 Plan: Manual J & D

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

Project Information

For: Touchstone Heating & Air, Inc.
 490 S.E. 3rd Avenue, Lake Butler, FL 32054
 Phone: (386) 496 - 3467 Fax: (386) 496 - 3147

Design Information

	Htg	Clg	Infiltration	
Outside db (°F)	33	92	Method	Simplified
Inside db (°F)	68	75	Construction quality	Average
Design TD (°F)	35	17	Fireplaces	0
Daily range	-	M		
Inside humidity (%)	50	50		
Moisture difference (gr/lb)	29	47		

HEATING EQUIPMENT

Make York
 Trade YORK
 Model YZF04214C
 AHRI ref 202349385

Efficiency 9 HSPF
 Heating input
 Heating output 40500 Btuh @ 47°F
 Temperature rise 26 °F
 Actual air flow 1400 cfm
 Air flow factor 0.044 cfm/Btuh
 Static pressure 0.51 in H2O
 Space thermostat
 Capacity balance point = 27 °F

Backup:

Input = 10 kW, Output = 34121 Btuh, 100 AFUE

COOLING EQUIPMENT

Make York
 Trade YORK
 Cond YZF04214C
 Coil AV480CT
 AHRI ref 202349385

Efficiency 12.5 EER, 16 SEER
 Sensible cooling 28000 Btuh
 Latent cooling 12000 Btuh
 Total cooling 40000 Btuh
 Actual air flow 1400 cfm
 Air flow factor 0.044 cfm/Btuh
 Static pressure 0.51 in H2O
 Load sensible heat ratio 0.84

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
Bedroom #2	165	3952	3094	174	137
Bedroom #3	132	1925	2455	85	108
Mstr Bedroom	226	4664	4044	205	179
Family Room	480	7331	6460	323	285
Storage	105	3017	2188	133	97
Laundry	63	1339	2237	59	99
Office #2	110	1644	2338	72	103
Office	110	1644	2338	72	103
Bathrm	60	774	560	34	25
Bath #2	72	853	365	38	16
Kitchen/Dining	502	4683	5620	206	248

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



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Entire House	2025	31824	31699	1400	1400
Other equip loads		0	1707		
Equip. @ 0.97 RSM			32403		
Latent cooling			6194		
TOTALS	2025	31824	38598	1400	1400

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



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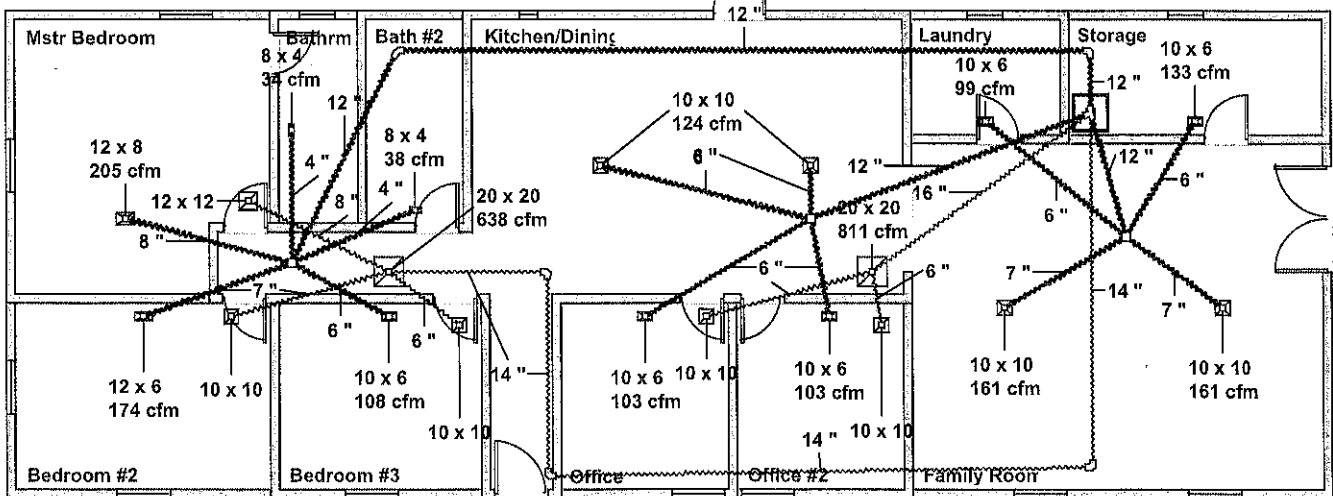
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Sheet 1



Job #: Mitchell Residence
Performed by Dakota Cross for:

Touchstone Heating & Air, Inc.
 490 S.E. 3rd Avenue
 Lake Butler, FL 32054
 Phone: (386) 496 - 3487 Fax: (386) 496 - 3147

New Age Dimensions, LLC.

14080 S.E. 122nd Lane Road
 Ocklawaha, FL 32179
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 john.newage@gmail.com

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Manual S Compliance Report

Entire House

New Age Dimensions, LLC.

Job: Mitchell Residence
Date: 5/4/2022
By: Dakota Cross
Plan: Manual J & D

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

Project Information

For: Touchstone Heating & Air, Inc.
490 S.E. 3rd Avenue, Lake Butler, FL 32054
Phone: (386) 496 - 3467 Fax: (386) 496 - 3147

Cooling Equipment

Design Conditions

Outdoor design DB:	92.0°F	Sensible gain:	33405 Btuh	Entering coil DB:	78.5°F
Outdoor design WB:	76.3°F	Latent gain:	6194 Btuh	Entering coil WB:	64.0°F
Indoor design DB:	75.0°F	Total gain:	39600 Btuh		
Indoor RH:	50%	Estimated airflow:	1400 cfm		

Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	Split ASHP				
Manufacturer:	York	Model:	YZF04214C+AV480CT		
Actual airflow:	1400 cfm				
Sensible capacity:	28000 Btuh	84% of load			
Latent capacity:	12000 Btuh	194% of load			
Total capacity:	40000 Btuh	101% of load	SHR:	70%	

Heating Equipment

Design Conditions

Outdoor design DB:	33.4°F	Heat loss:	31824 Btuh	Entering coil DB:	67.0°F
Indoor design DB:	68.0°F				

Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	Split ASHP				
Manufacturer:	York	Model:	YZF04214C+AV480CT		
Actual airflow:	1400 cfm				
Output capacity:	40500 Btuh	127% of load		Capacity balance:	27 °F
Supplemental heat required:	0 Btuh			Economic balance:	-99 °F

Backup equipment type:	Elec strip				
Manufacturer:		Model:			
Actual airflow:	1400 cfm				
Output capacity:	10.0 kW	107% of load	Temp. rise:	22 °F	

Meets all requirements of ACCA Manual S.



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Duct System Summary

Entire House

New Age Dimensions, LLC.

Job: Mitchell Residence
 Date: 5/4/2022
 By: Dakota Cross
 Plan: Manual J & D

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

Project Information

For: Touchstone Heating & Air, Inc.
 490 S.E. 3rd Avenue, Lake Butler, FL 32054
 Phone: (386) 496 - 3467 Fax: (386) 496 - 3147

	Heating	Cooling
External static pressure	0.51 in H ₂ O	0.51 in H ₂ O
Pressure losses	0.18 in H ₂ O	0.18 in H ₂ O
Available static pressure	0.33 in H ₂ O	0.33 in H ₂ O
Supply / return available pressure	0.193 / 0.137 in H ₂ O	0.193 / 0.137 in H ₂ O
Lowest friction rate	0.880 in/100ft	0.880 in/100ft
Actual air flow	1400 cfm	1400 cfm
Total effective length (TEL)	413 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
Bath #2	h 853	38	16	0.880	4.0	0x0	VIFx	64.0	175.0	st5
Bathrm	h 774	34	25	0.880	4.0	0x0	VIFx	63.9	175.0	st5
Bedroom #2	h 3952	174	137	0.880	7.0	0x0	VIFx	65.4	175.0	st5
Bedroom #3	c 2455	85	108	0.880	6.0	0x0	VIFx	62.7	175.0	st5
Family Room	h 3666	161	143	0.880	7.0	0x0	VIFx	15.3	155.0	st1
Family Room-A	h 3666	161	143	0.880	7.0	0x0	VIFx	14.1	155.0	st1
Kitchen/Dining	c 2810	103	124	0.880	6.0	0x0	VIFx	29.5	155.0	st3
Kitchen/Dining-A	c 2810	103	124	0.880	6.0	0x0	VIFx	20.1	155.0	st3
Laundry	c 2237	59	99	0.880	6.0	0x0	VIFx	17.6	155.0	st1
Mstr Bedroom-A	h 4664	205	179	0.880	8.0	0x0	VIFx	66.2	175.0	st5
Office	c 2338	72	103	0.880	6.0	0x0	VIFx	28.1	155.0	st3
Office #2	c 2338	72	103	0.880	6.0	0x0	VIFx	22.7	155.0	st3
Storage	h 3017	133	97	0.880	6.0	0x0	VIFx	14.9	155.0	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	514	481	0.880	655	12.0	0 x 0	VinIFlx	
st2	Peak AVF	535	465	0.880	682	12.0	0 x 0	VinIFlx	
st3	Peak AVF	351	455	0.880	579	12.0	0 x 0	VinIFlx	
st4	Peak AVF	535	465	0.880	682	12.0	0 x 0	VinIFlx	st2
st5	Peak AVF	535	465	0.880	682	12.0	0 x 0	VinIFlx	st4



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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	20x 15	638	589	171.5	0.880	597	14.0	0x 0		VIFx	rst21
rb1	20x 19	762	811	85.4	0.880	581	16.0	0x 0		VIFx	rst25

Return Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
rst21	Peak AVF	638	589	0.880	597	14.0	0 x 0	VinIFlx	rst22
rst22	Peak AVF	638	589	0.880	597	14.0	0 x 0	VinIFlx	rst23
rst23	Peak AVF	638	589	0.880	597	14.0	0 x 0	VinIFlx	rst24
rst24	Peak AVF	638	589	0.880	597	14.0	0 x 0	VinIFlx	
rst25	Peak AVF	762	811	0.880	581	16.0	0 x 0	VinIFlx	