



# Certificate of Product Ratings

AHRI Certified Reference Number : 209551791    Date : 11-13-2022    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) : YZT48B21

Indoor Unit Brand Name : ADP

Indoor Unit Model Number (Evaporator and/or Air Handler) : AV600CT

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 : 45500

SEER : 16.00

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

Heating Capacity (H12) - Single or High Stage (47F) : 44500

HSPF (Region IV) : 9.50



†"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.

The Department of Energy has published updated energy efficiency metrics for central air conditioners and heat pumps. This publication reflects both the 1987 metric (SEER) and the 2023 metric (SEER2). Efficiency requirements are published at 10 C.F.R. 430.32(c). Please refer to [www.AHRInet.org](http://www.AHRInet.org) for more information about updated energy efficiency metrics.

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**CERTIFICATE NO.:**

133128244565783058



# Certificate of Product Ratings

AHRI Certified Reference Number : 202349386    Date : 11-13-2022    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) : YZT36B21

Indoor Unit Brand Name : ADP

Indoor Unit Model Number (Evaporator and/or Air Handler) : AV360CT

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 : 34600

SEER : 17.00

EER (A2) - Single or High Stage (95F) : 13.00

Heating Capacity (H12) - Single or High Stage (47F) : 31800

HSPF (Region IV) : 9.50



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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.

The Department of Energy has published updated energy efficiency metrics for central air conditioners and heat pumps. This publication reflects both the 1987 metric (SEER) and the 2023 metric (SEER2). Efficiency requirements are published at 10 C.F.R. 430.32(c). Please refer to [www.AHRInet.org](http://www.AHRInet.org) for more information about updated energy efficiency metrics.

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**CERTIFICATE NO.:**

133128245003283933

# 2020 - AIR BARRIER AND INSULATION INSPECTION COMPONENT CRITERIA

**TABLE 402.4.1.1**  
**AIR BARRIER AND INSULATION INSPECTION COMPONENT CRITERIA**<sup>a</sup>

Project Name: Paul & Leslie McDaniel Street: 465 SW Gusto Gln City, State, Zip: Lake City, FL, 32024 Owner: Paul & Leslie McDaniel Design Location: FL, Gainesville Builder Name: Paul & Leslie McDaniel Permit Office: Columbia Permit Number: Jurisdiction: 221200			CHECK
COMPONENT	AIR BARRIER CRITERIA	INSULATION INSTALLATION CRITERIA	
General requirements	A continuous air barrier shall be installed in the building envelope. The exterior thermal envelope contains a continuous air barrier. Breaks or joints in the air barrier shall be sealed.	Air-permeable insulation shall not be used as a sealing material.	
Ceiling/attic	The air barrier in any dropped ceiling/soffit shall be aligned with the insulation and any gaps in the air barrier shall be sealed. Access openings, drop down stairs or knee wall doors to unconditioned attic spaces shall be sealed.	The insulation in any dropped ceiling/soffit shall be aligned with the air barrier.	
Walls	The junction of the foundation and sill plate shall be sealed. The junction of the top plate and the top of exterior walls shall be sealed. Knee walls shall be sealed.	Cavities within corners and headers of frame walls shall be insulated by completely filling the cavity with a material having a thermal resistance of R-3 per inch minimum. Exterior thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier.	
Windows, skylights and doors	The space between window/door jambs and framing, and skylights and framing shall be sealed.		
Rim joists	Rim joists shall include the air barrier.	Rim joists shall be insulated.	
Floors (including above-garage and cantilevered floors)	The air barrier shall be installed at any exposed edge of insulation.	Floor framing cavity insulation shall be installed to maintain permanent contact with the underside of subfloor decking, or floor framing cavity insulation shall be permitted to be in contact with the top side of sheathing, or continuous insulation installed on the underside of floor framing and extends from the bottom to the top of all perimeter floor framing members.	
Crawl space walls	Exposed earth in unvented crawl spaces shall be covered with a Class I vapor retarder with overlapping joints taped.	Where provided instead of floor insulation, insulation shall be permanently attached to the crawlspace walls.	
Shafts, penetrations	Duct shafts, utility penetrations, and flue shafts opening to exterior or unconditioned space shall be sealed.		
Narrow cavities		Batts in narrow cavities shall be cut to fit, or narrow cavities shall be filled by insulation that on installation readily conforms to the available cavity spaces.	
Garage separation	Air sealing shall be provided between the garage and conditioned spaces.		
Recessed lighting	Recessed light fixtures installed in the building thermal envelope shall be sealed to the finished surface.	Recessed light fixtures installed in the building thermal envelope shall be air tight and IC rated.	
Plumbing and wiring		Batt insulation shall be cut neatly to fit around wiring and plumbing in exterior walls, or insulation that on installation readily conforms to available space shall extend behind piping and wiring.	
Shower/tub on exterior wall	The air barrier installed at exterior walls adjacent to showers and tubs shall separate them from the showers and tubs.	Exterior walls adjacent to showers and tubs shall be insulated.	
Electrical/phone box on exterior walls	The air barrier shall be installed behind electrical or communication boxes or air-sealed boxes shall be installed.		
HVAC register boots	HVAC supply and return register boots that penetrate building thermal envelope shall be sealed to the sub-floor, wall covering or ceiling		
Concealed sprinklers	When required to be sealed, concealed fire sprinklers shall only be sealed in a manner that is recommended by the manufacturer. Caulking or other adhesive sealants shall not be used to fill voids between fire sprinkler cover plates and walls or ceilings.		

a. In addition, inspection of log walls shall be in accordance with the provisions of ICC-400.

# ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX\* = 80

The lower the EnergyPerformance Index, the more efficient the home.

465 SW Gusty Gln, Lake City, FL, 32024

1. New construction or existing	New (From Plans)	10. Wall Type and Insulation	Insulation	Area
2. Single family or multiple family	Detached	a. Frame - Wood, Exterior	R=13.0	4098.50 ft²
3. Number of units, if multiple family	1	b. Frame - Wood, Adjacent	R=13.0	386.67 ft²
4. Number of Bedrooms	5	c. N/A	R=	ft²
5. Is this a worst case?	No	d. N/A	R=	ft²
6. Conditioned floor area (ft²)	3952	11. Ceiling Type and insulation level	Insulation	Area
7. Windows**	Description	a. Under Attic (Vented)	R=30.0	3148.00 ft²
a. U-Factor:	Dbl, U=0.47	b. N/A	R=	ft²
SHGC:	SHGC=0.31	c. N/A	R=	ft²
b. U-Factor:	N/A	12. Ducts, location & insulation level	R	ft²
SHGC:		a. Sup: Attic, Ret: Attic, AH: Laundry	6	159
c. U-Factor:	N/A	b. Sup: Attic, Ret: Attic, AH: Mech	6	86
SHGC:				
d. U-Factor:	N/A	13. Cooling systems	kBtu/hr	Efficiency
SHGC:		a. Central Unit	45.5	SEER:16.00
Area Weighted Average Overhang Depth:	3.458 ft.	b. Central Unit	34.6	SEER:17.00
Area Weighted Average SHGC:	0.310	14. Heating systems	kBtu/hr	Efficiency
8. Skylights	Description	a. Electric Heat Pump	45.5	HSPF:9.50
a. U-Factor(AVG):	N/A	b. Electric Heat Pump	34.6	HSPF:9.50
SHGC(AVG):	N/A	15. Hot water systems		
9. Floor Types	Insulation	a. Natural Gas	Cap: 1 gallons	
a. Slab-On-Grade Edge Insulation	R=0.0	b. Conservation features	EF: 0.8	
b. Floor over Garage	R=19.0	None		
c. other (see details)	R=	Credits (Performance method)		CF, Pstat
	720.90 ft²			

I certify that this home has complied with the Florida Energy Efficiency Code for Building Construction through the above energy saving features which will be installed (or exceeded) in this home before final inspection. Otherwise, a new EPL Display Card will be completed based on installed Code compliant features.

Builder Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Address of New Home: \_\_\_\_\_ City/FL Zip: \_\_\_\_\_



\*Note: This is not a Building Energy Rating. If your Index is below 70, your home may qualify for energy efficient mortgage (EEM) incentives if you obtain a Florida Energy Rating. For information about the Florida Building Code, Energy Conservation, contact the Florida Building Commission's support staff.

\*\*Label required by Section R303.1.3 of the Florida Building Code, Energy Conservation, if not DEFAULT.



# Load Short Form

## System #1

### New Age Dimensions, LLC.

Job: McDaniel Residence  
 Date: 11/9/2022  
 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 YZT48B21  
 AHRI ref 209551791

Efficiency 9.5 HSPF  
 Heating input  
 Heating output 44500 Btuh @ 47°F  
 Temperature rise 25 °F  
 Actual air flow 1600 cfm  
 Air flow factor 0.044 cfm/Btuh  
 Static pressure 0.51 in H2O  
 Space thermostat  
 Capacity balance point = 32 °F

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

### COOLING EQUIPMENT

Make York  
 Trade YORK  
 Cond YZT48B21  
 Coil AV600CT  
 AHRI ref 209551791

Efficiency 12.5 EER, 16 SEER  
 Sensible cooling 31850 Btuh  
 Latent cooling 13650 Btuh  
 Total cooling 45500 Btuh  
 Actual air flow 1600 cfm  
 Air flow factor 0.046 cfm/Btuh  
 Static pressure 0.51 in H2O  
 Load sensible heat ratio 0.82

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
Bedroom #2	172	4511	3247	199	149
Bathrm #2	68	1198	964	53	44
Bedroom #3	172	4498	3734	199	172
Foyer	59	1067	646	47	30
Dinette	64	432	229	19	11
Pantry	55	1667	1306	74	60
Kitchen	266	3995	4193	176	193
Great Room	311	4661	7176	206	330
Dining	184	281	1534	12	70
Mudroom	138	976	1746	43	80
Laundry	123	2753	2525	121	116
Mstr WIC	119	1067	352	47	16
Mstr Bathrm	150	3110	1192	137	55
Mstr Bedroom	274	2596	3509	115	161

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



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2022-Nov-14 08:07:47

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Sitting	132	3442	2475	152	114
System #1	2286	36258	34830	1600	1600
Other equip loads		5716	2822		
Equip. @ 0.97 RSM			36522		
Latent cooling			8505		
TOTALS	2286	41973	45027	1600	1600

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



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# Load Short Form

## System #2

### New Age Dimensions, LLC.

Job: McDaniel Residence  
 Date: 11/9/2022  
 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 YZT36B21  
 AHRI ref 202349386

Efficiency 9.5 HSPF  
 Heating input  
 Heating output 31800 Btuh @ 47°F  
 Temperature rise 24 °F  
 Actual air flow 1200 cfm  
 Air flow factor 0.054 cfm/Btuh  
 Static pressure 0.51 in H2O  
 Space thermostat  
 Capacity balance point = 25 °F

Backup:

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

### COOLING EQUIPMENT

Make York  
 Trade YORK  
 Cond YZT36B21  
 Coil AV360CT  
 AHRI ref 202349386

Efficiency 13.0 EER, 17 SEER  
 Sensible cooling 24220 Btuh  
 Latent cooling 10380 Btuh  
 Total cooling 34600 Btuh  
 Actual air flow 1200 cfm  
 Air flow factor 0.045 cfm/Btuh  
 Static pressure 0.51 in H2O  
 Load sensible heat ratio 0.86

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
Bedroom #4	156	2860	3160	153	142
Bedroom #5	163	3188	3766	171	169
1/2 Bath	42	65	100	4	4
1/2 Bath #2	39	78	102	4	5
Shwr	33	51	79	3	4
Mech	143	1593	3199	85	143
Bonus Room	854	11749	12374	629	554
Landing	235	2823	4007	151	179

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



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System #2	1664	22409	26785	1200	1200
Other equip loads		0	1707		
Equip. @ 0.97 RSM			27637		
Latent cooling			4501		
TOTALS	1664	22409	32138	1200	1200

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



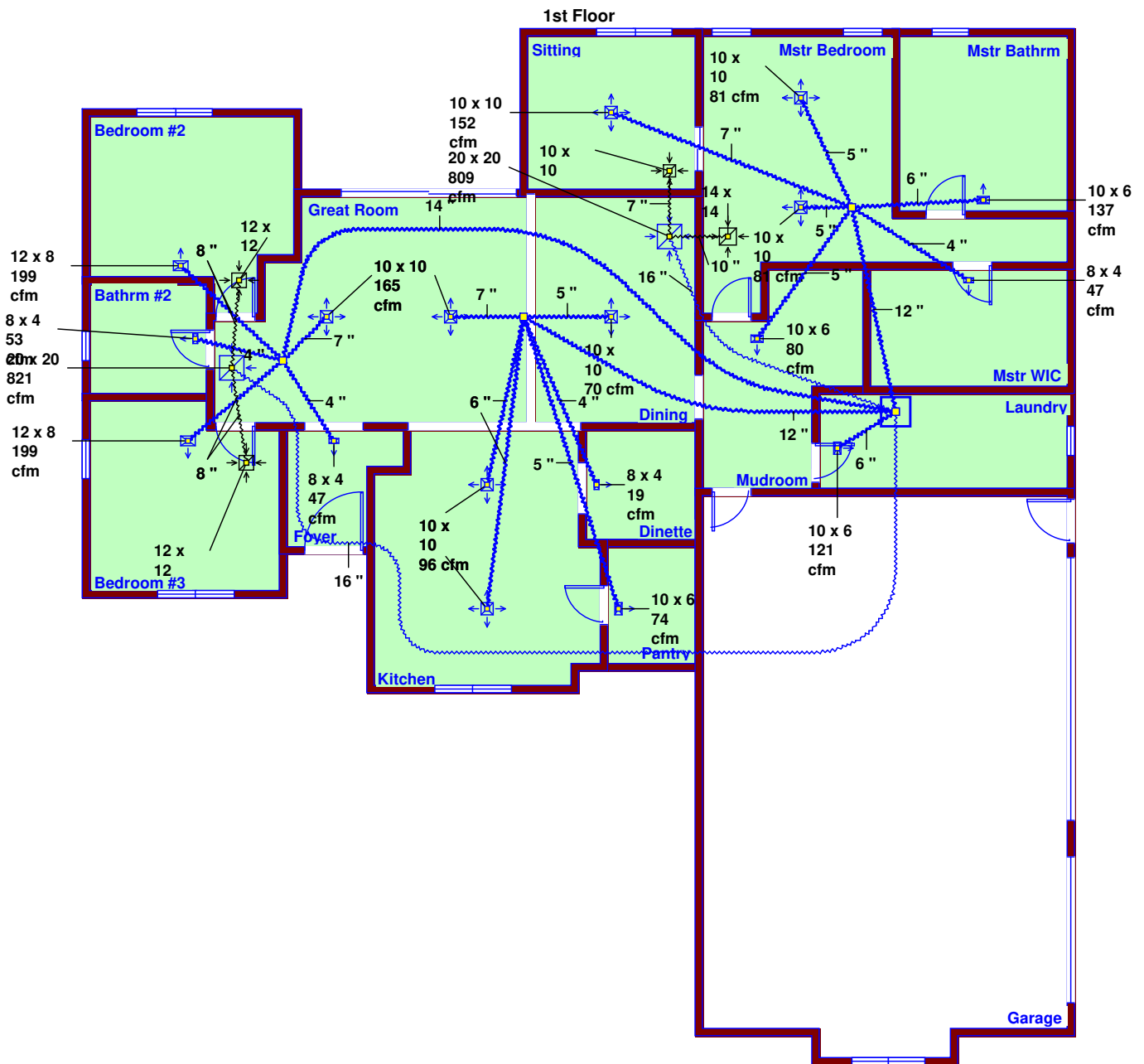
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**Job #: McDaniel Residence  
Performed by Dakota Cross for:**

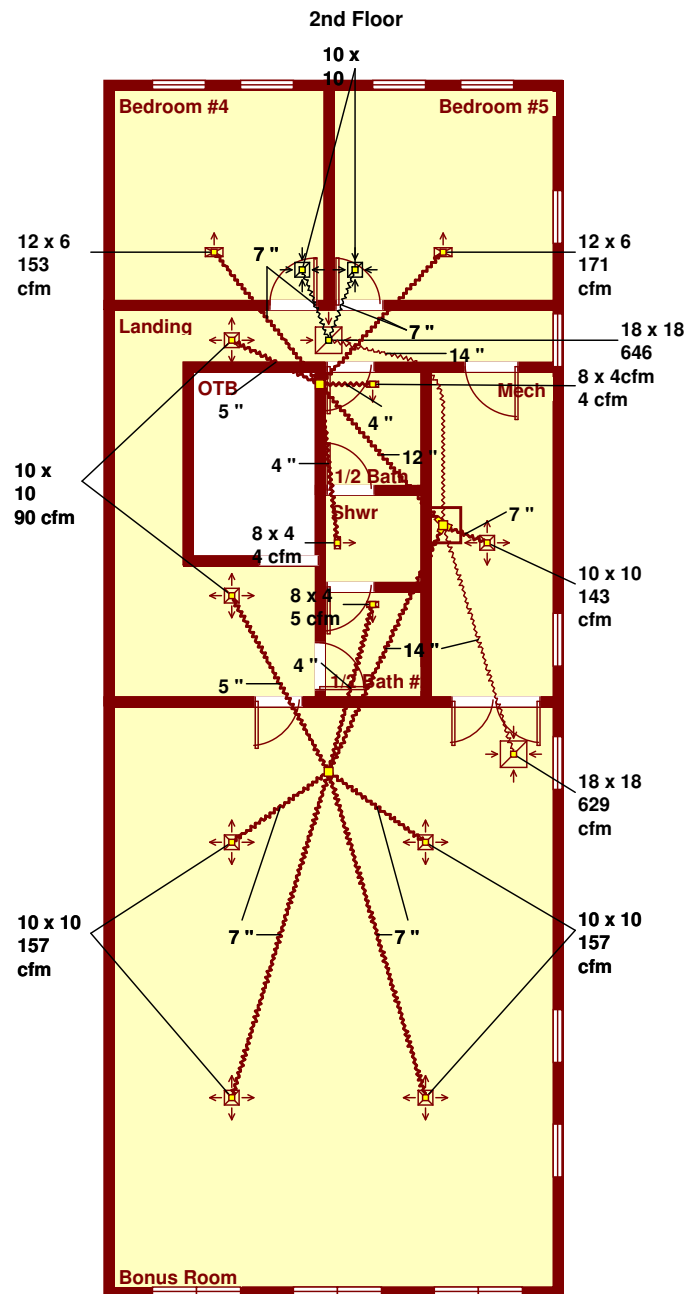
Touchstone Heating & Air, Inc.  
490 S.E. 3rd Avenue  
Lake Butler, FL 32054  
Phone: (386) 496 - 3467 Fax: (386) 496 - 3147

**New Age Dimensions, LLC.**

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

Scale: 1 : 131

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**Job #: McDaniel Residence**  
**Performed by Dakota Cross for:**

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

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# Manual S Compliance Report

## System #1

### New Age Dimensions, LLC.

Job: McDaniel Residence  
Date: 11/9/2022  
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:	37652	Btuh	Entering coil DB:	79.0°F
Outdoor design WB:	76.3°F	Latent gain:	8505	Btuh	Entering coil WB:	64.6°F
Indoor design DB:	75.0°F	Total gain:	46157	Btuh		
Indoor RH:	50%	Estimated airflow:	1600	cfm		

### Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	Split ASHP		
Manufacturer:	York	Model:	YZT48B21+AV600CT
Actual airflow:	1600	cfm	
Sensible capacity:	31850	Btuh	85% of load
Latent capacity:	13650	Btuh	160% of load
Total capacity:	45500	Btuh	99% of load SHR: 70%

## Heating Equipment

### Design Conditions

Outdoor design DB:	33.4°F	Heat loss:	41973	Btuh	Entering coil DB:	63.6°F
Indoor design DB:	68.0°F					

### Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	Split ASHP		
Manufacturer:	York	Model:	YZT48B21+AV600CT
Actual airflow:	1600	cfm	
Output capacity:	44500	Btuh	106% of load
Supplemental heat required:	0	Btuh	
Capacity balance:	32	°F	
Economic balance:	-99	°F	

Backup equipment type:	Elec strip		
Manufacturer:		Model:	
Actual airflow:	1600	cfm	
Output capacity:	10.0	kW	81% of load Temp. rise: 20 °F

Meets all requirements of ACCA Manual S.



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# Manual S Compliance Report

## System #2

### New Age Dimensions, LLC.

Job: McDaniel Residence  
Date: 11/9/2022  
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:	28492	Btuh	Entering coil DB:	78.4°F
Outdoor design WB:	76.3°F	Latent gain:	4501	Btuh	Entering coil WB:	64.0°F
Indoor design DB:	75.0°F	Total gain:	32993	Btuh		
Indoor RH:	50%	Estimated airflow:	1200	cfm		

### Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	Split ASHP		
Manufacturer:	York	Model:	YZT36B21+AV360CT
Actual airflow:	1200	cfm	
Sensible capacity:	24220	Btuh	85% of load
Latent capacity:	10380	Btuh	231% of load
Total capacity:	34600	Btuh	105% of load SHR: 70%

## Heating Equipment

### Design Conditions

Outdoor design DB:	33.4°F	Heat loss:	22409	Btuh	Entering coil DB:	67.1°F
Indoor design DB:	68.0°F					

### Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	Split ASHP		
Manufacturer:	York	Model:	YZT36B21+AV360CT
Actual airflow:	1200	cfm	
Output capacity:	31800	Btuh	142% of load
Supplemental heat required:	0	Btuh	
Capacity balance:	25	°F	
Economic balance:	-99	°F	

Backup equipment type:	Elec strip		
Manufacturer:		Model:	
Actual airflow:	1200	cfm	
Output capacity:	10.0	kW	152% of load Temp. rise: 26 °F

Meets all requirements of ACCA Manual S.



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# Duct System Summary

## System #1

### New Age Dimensions, LLC.

Job: McDaniel Residence  
 Date: 11/9/2022  
 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 <sub>2</sub> O	0.51 in H <sub>2</sub> O
Pressure losses	0.18 in H <sub>2</sub> O	0.18 in H <sub>2</sub> O
Available static pressure	0.33 in H <sub>2</sub> O	0.33 in H <sub>2</sub> O
Supply / return available pressure	0.189 / 0.141 in H <sub>2</sub> O	0.189 / 0.141 in H <sub>2</sub> O
Lowest friction rate	0.880 in/100ft	0.880 in/100ft
Actual air flow	1600 cfm	1600 cfm
Total effective length (TEL)	408 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
Bathrm #2	h 1198	53	44	0.880	4.0	0x0	VIFx	59.8	170.0	st1
Bedroom #2	h 4511	199	149	0.880	8.0	0x0	VIFx	63.2	170.0	st1
Bedroom #3	h 4498	199	172	0.880	8.0	0x0	VIFx	62.1	170.0	st1
Dinette	h 432	19	11	0.880	4.0	0x0	VIFx	39.7	160.0	st2
Dining	c 1534	12	70	0.880	5.0	0x0	VIFx	33.2	160.0	st2
Foyer	h 1067	47	30	0.880	4.0	0x0	VIFx	60.1	170.0	st1
Great Room	c 3588	103	165	0.880	7.0	0x0	VIFx	32.2	160.0	st2
Great Room-A	c 3588	103	165	0.880	7.0	0x0	VIFx	57.8	170.0	st1
Kitchen	c 2097	88	96	0.880	6.0	0x0	VIFx	39.0	160.0	st2
Kitchen-A	c 2097	88	96	0.880	6.0	0x0	VIFx	47.4	160.0	st2
Laundry	h 2753	121	116	0.880	6.0	0x0	VIFx	4.7	95.0	
Mstr Bathrm	h 3110	137	55	0.880	6.0	0x0	VIFx	23.3	155.0	st3
Mstr Bedroom	c 1755	57	81	0.880	5.0	0x0	VIFx	22.6	155.0	st3
Mstr Bedroom-A	c 1755	57	81	0.880	5.0	0x0	VIFx	17.8	155.0	st3
Mstr WIC	h 1067	47	16	0.880	4.0	0x0	VIFx	23.8	155.0	st3
Mudroom	c 1746	43	80	0.880	5.0	0x0	VIFx	25.4	155.0	st3
Pantry	h 1667	74	60	0.880	5.0	0x0	VIFx	48.2	160.0	st2
Sitting	h 3442	152	114	0.880	7.0	0x0	VIFx	32.1	155.0	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
st1	Peak AVF	600	560	0.880	562	14.0	0 x 0	VinIFlx	
st2	Peak AVF	384	498	0.880	635	12.0	0 x 0	VinIFlx	
st3	Peak AVF	494	426	0.880	629	12.0	0 x 0	VinIFlx	

## 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	20x 19	809	779	96.4	0.880	579	16.0	0x 0		VIFx	rst13
rb2	20x 19	791	821	174.4	0.880	588	16.0	0x 0		VIFx	rst12

## Return Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
rst12	Peak AVF	791	821	0.880	588	16.0	0 x 0	VinIFlx	
rst13	Peak AVF	809	779	0.880	579	16.0	0 x 0	VinIFlx	





# Duct System Summary

## System #2

### New Age Dimensions, LLC.

Job: McDaniel Residence  
 Date: 11/9/2022  
 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 <sub>2</sub> O	0.51 in H <sub>2</sub> O
Pressure losses	0.18 in H <sub>2</sub> O	0.18 in H <sub>2</sub> O
Available static pressure	0.33 in H <sub>2</sub> O	0.33 in H <sub>2</sub> O
Supply / return available pressure	0.223 / 0.107 in H <sub>2</sub> O	0.223 / 0.107 in H <sub>2</sub> O
Lowest friction rate	0.880 in/100ft	0.880 in/100ft
Actual air flow	1200 cfm	1200 cfm
Total effective length (TEL)	280 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
1/2 Bath	c 100	4	4	0.880	4.0	0x0	VIFx	13.6	155.0	st4
1/2 Bath #2	c 102	4	5	0.880	4.0	0x0	VIFx	25.3	155.0	st5
Bedroom #4	h 2860	153	142	0.880	7.0	0x0	VIFx	20.2	155.0	st4
Bedroom #5	h 3188	171	169	0.880	7.0	0x0	VIFx	20.9	155.0	st4
Bonus Room	h 2937	157	139	0.880	7.0	0x0	VIFx	22.2	155.0	st5
Bonus Room-A	h 2937	157	139	0.880	7.0	0x0	VIFx	22.2	155.0	st5
Bonus Room-B	h 2937	157	139	0.880	7.0	0x0	VIFx	34.7	155.0	st5
Bonus Room-C	h 2937	157	139	0.880	7.0	0x0	VIFx	34.7	155.0	st5
Landing	c 2003	76	90	0.880	5.0	0x0	VIFx	16.2	155.0	st4
Landing-A	c 2003	76	90	0.880	5.0	0x0	VIFx	26.8	155.0	st5
Mech	c 3199	85	143	0.880	7.0	0x0	VIFx	2.7	95.0	
Shwr	c 79	3	4	0.880	4.0	0x0	VIFx	19.7	155.0	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
st4	Peak AVF	406	408	0.880	520	12.0	0 x 0	VinIFlx	
st5	Peak AVF	709	649	0.880	663	14.0	0 x 0	VinIFlx	



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...soft HVAC\Touchstone\Paul & Leslie McDaniel.rup Calc = MJ8 Front Door faces: N

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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
rb4	18x 16	629	554	73.6	0.880	589	14.0	0x 0		VIFx	
rb1	18x 17	571	646	90.7	0.880	604	14.0	0x 0		VIFx	rst14

## Return Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
rst14	Peak AVF	571	646	0.880	604	14.0	0 x 0	VinIFlx	

