Project Summary
Entire House
Home InSight

Job: Website Example
Date: 15 April 2012
By: Sam Young

3150 E Hwy 34, Ste 209-226, Newnan, GA 30265 Phone: [M] 404-915-5321 Email: SherlockHomes@HomeInSight.biz Web: www.GABuilderEnergyServices.com

Project Information

For: Georgia Builder, High Performance Home Builders
Greater Atlanta Metro Area, Peachtree City, GA 30271
Phone: 404-915-5321
Web: www.HomeInSight.biz
Notes: Example Manual J, S, & D Reports

Design Information

Weather: Atlanta Hartsfield Intl AP, GA, US

Winter Design Conditions

Outside db	26	°F
Inside db	70	°F
Design TD	44	°F

Summer Design Conditions

Outside db	92	°F
Inside db	75	°F
Design TD	17	°F
Daily range	M	
Relative humidity	50	%
Moisture difference	36	gr/lb

Heating Summary

Structure	27753	Btuh
Ducts	2194	Btuh
Central vent (50 cfm)	***2342***	Btuh
Humidification	0	Btuh
Piping	0	Btuh
Equipment load	32289	Btuh

Sensible Cooling Equipment Load Sizing

Structure	16969	Btuh
Ducts	1658	Btuh
Central vent (50 cfm)	***874***	Btuh
Blower	0	Btuh
Use manufacturer's data	n	
Rate/swing multiplier	0.96	
Equipment sensible load	18819	Btuh

Infiltration

Method	Blower door
Shielding / stories	3 (partial) / 1
Pressure / AVF	50 Pa / 1000 cfm

	Heating	Cooling
Area (ft²)	2043	2043
Volume (ft³)	21152	21152
Air changes/hour	0.22	0.12
Equiv. AVF (cfm)	79	42

Latent Cooling Equipment Load Sizing

Structure	1805	Btuh
Ducts	541	Btuh
Central vent (50 cfm)	1188	Btuh
Equipment latent load	3535	Btuh
Equipment total load	22354	Btuh
Req. total capacity at 0.70 SHR	2.2	ton

Heating Equipment Summary

Make Trane
Trade XB13 WEATHERTRON
Model 4TWB3030B1
AHRI ref no 4643670

Efficiency	8.5 HSPF	
Heating input		
Heating output	28800	Btuh @ 47°F
Temperature rise	27	°F
Actual air flow	1000	cfm
Air flow factor	0.033	cfm/Btuh
Static pressure	0.50	in H2O
Space thermostat		

Cooling Equipment Summary

Make Trane
Trade XB13 WEATHERTRON
Cond 4TWB3030B1
Coil *AM7A0B30H21
AHRI ref no 4643670

Efficiency	12.0 EER, 14 SEER	
Sensible cooling	21000	Btuh
Latent cooling	9000	Btuh
Total cooling	30000	Btuh
Actual air flow	1000	cfm
Air flow factor	0.054	cfm/Btuh
Static pressure	0.50	in H2O
Load sensible heat ratio	0.85	

Bold/italic values have been manually overridden

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

AED Assessment
Entire House
Home InSight

Job: Website Example
Date: 15 April 2012
By: Sam Young

3150 E Hwy 34, Ste 209-226, Newnan, GA 30265 Phone: [M] 404-915-5321 Email: SherlockHomes@HomeInSight.biz Web: www.GABuilderEnergyServices.com

Project Information

For: Georgia Builder, High Performance Home Builders
Greater Atlanta Metro Area, Peachtree City, GA 30271
Phone: 404-915-5321
Web: www.HomeInSight.biz

Design Conditions

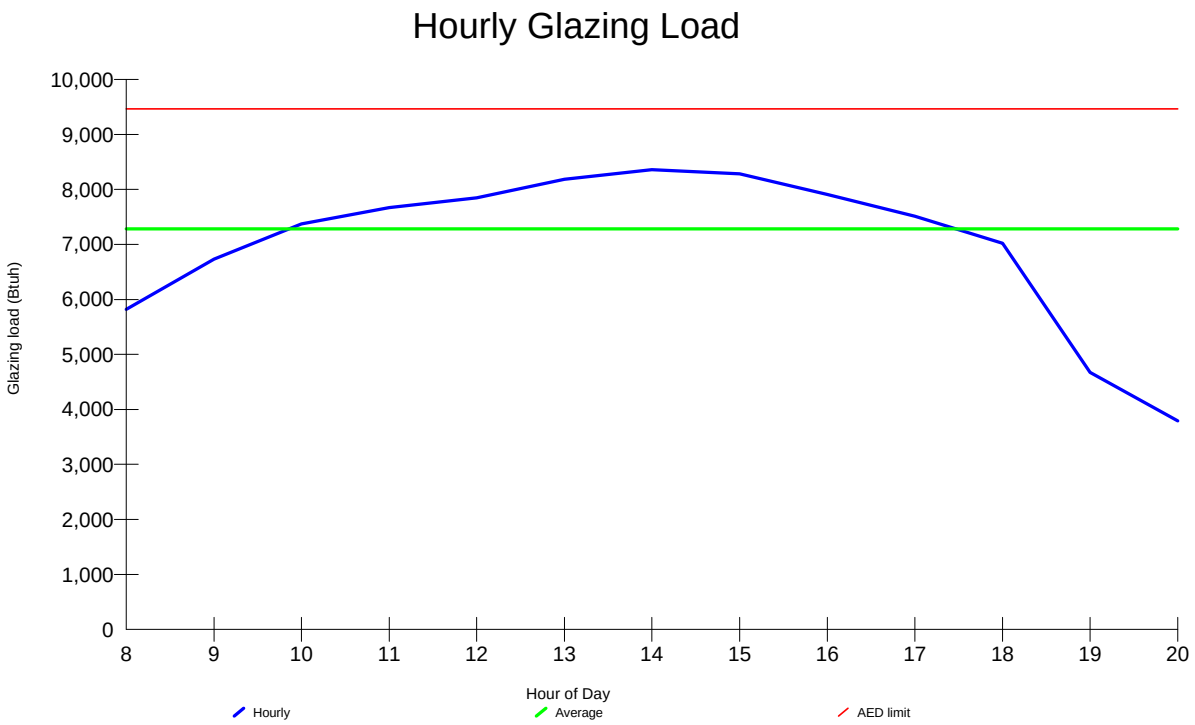
Location:
Atlanta Hartsfield Intl AP, GA, US
Elevation: 1027 ft
Latitude: 34 °N

Outdoor:	**Heating**	**Cooling**
Dry bulb (°F)	26	92
Daily range (°F)	-	17 (M)
Wet bulb (°F)	-	74
Wind speed (mph)	15.0	7.5

Indoor:	**Heating**	**Cooling**
Indoor temperature (°F)	70	75
Design TD (°F)	44	17
Relative humidity (%)	50	50
Moisture difference (gr/lb)	40.4	36.3

Infiltration:

Test for Adequate Exposure Diversity



Maximum hourly glazing load exceeds average by 14.8%.

House has adequate exposure diversity (AED), based on AED limit of 30%.

AED excursion: 0 Btuh

Manual S Compliance Report
Entire House
Home InSight

Job: Website Example
Date: 15 April 2012
By: Sam Young

3150 E Hwy 34, Ste 209-226, Newnan, GA 30265 Phone: [M] 404-915-5321 Email: SherlockHomes@HomeInSight.biz Web: www.GABuilderEnergyServices.com

Project Information

For: Georgia Builder, High Performance Home Builders
Greater Atlanta Metro Area, Peachtree City, GA 30271
Phone: 404-915-5321
Web: www.HomeInSight.biz

Cooling Equipment

Design Conditions

Outdoor design DB:	91.5°F	Sensible gain:	18819	Btuh	Entering coil DB: 75.9°F
Outdoor design WB:	74.0°F	Latent gain:	3535	Btuh	Entering coil WB: 63.1°F
Indoor design DB:	75.0°F	Total gain:	22354	Btuh	
Indoor RH:	50%	Estimated airflow:	1000	cfm	

Manufacturer's Performance Data at Actual Design Conditions

Equipment type: Split ASHP
Manufacturer: Trane Model: 4TWB3030B1+*AM7A0B30H21

Actual airflow:	1000	cfm		
Sensible capacity:	22746	Btuh	121% of load	
Latent capacity:	5678	Btuh	161% of load	
Total capacity:	28424	Btuh	127% of load	SHR: 80%

Heating Equipment

Design Conditions

Outdoor design DB:	25.8°F	Heat loss:	32289	Btuh	Entering coil DB: 67.6°F
Indoor design DB:	70.0°F				

Manufacturer's Performance Data at Actual Design Conditions

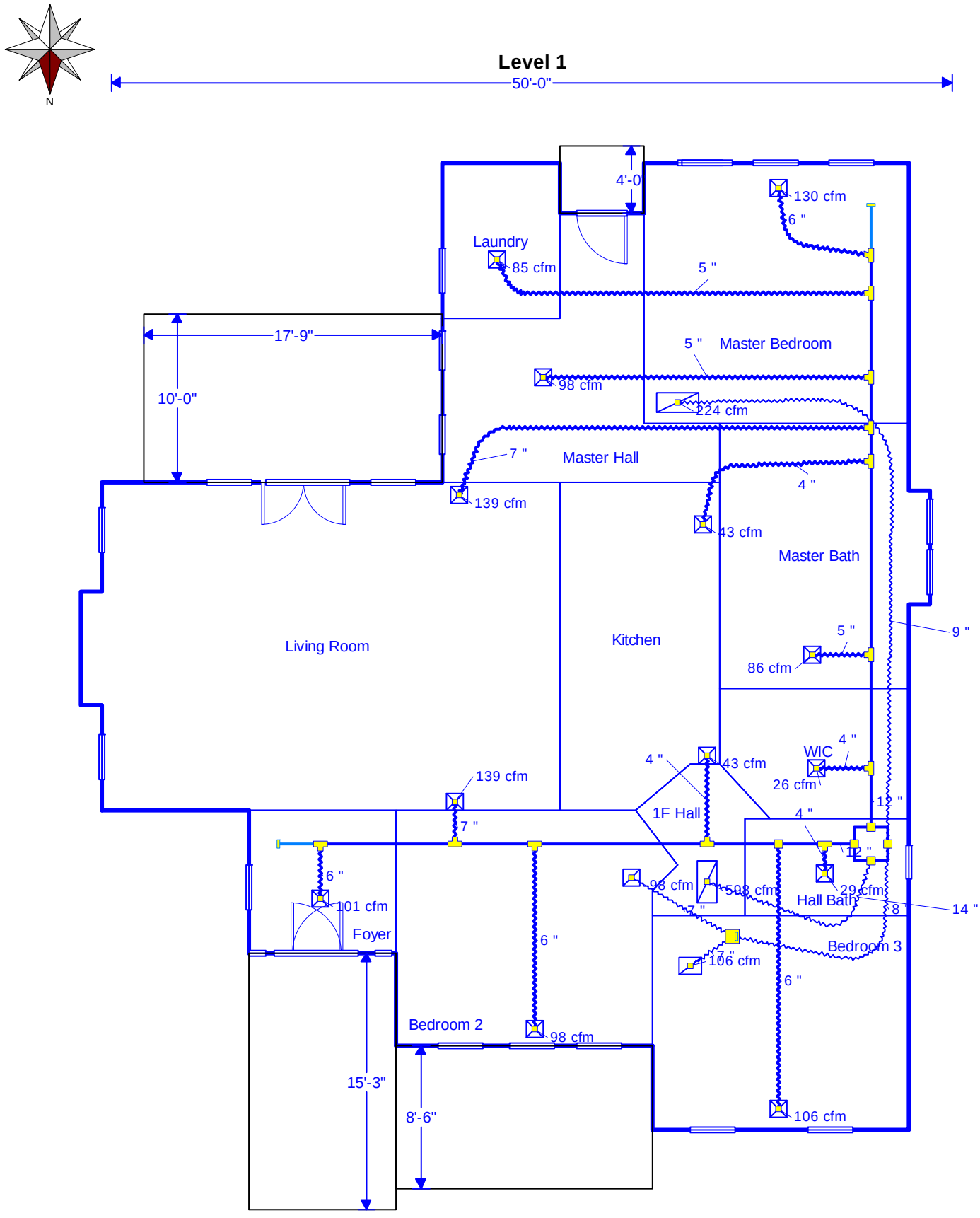
Equipment type: Split ASHP
Manufacturer: Trane Model: 4TWB3030B1+*AM7A0B30H21

Actual airflow:	1000	cfm			
Output capacity:	20344	Btuh	63% of load	Capacity balance:	38 °F
Supplemental heat required:	11945	Btuh		Economic balance:	-99 °F

Backup equipment type: Elec strip
Manufacturer: Model:

Actual airflow:	1000	cfm			
Output capacity:	32289	Btuh	100% of load	Temp. rise:	0 °F

The above equipment was selected in accordance with ACCA Manual S.



Job #: Website Example
Performed by Sam Young for:
Georgia Builder
Greater Atlanta Metro Area
Peachtree City, GA 30271
Phone: 404-915-5321
www.HomeInSight.biz

Home InSight
3150 E Hwy 34, Ste 209-226
Newnan, GA 30265
Phone: [M] 404-915-5321
www.GABuilderEnergyServices.com SherlockHom...

Scale: 1 : 97

Right-Suite® Universal 2012
12.0.00 RSU13835
2012-Apr-15 18:44:53
...bsite\Manuals J S T D Report.rup

Duct System Summary
Entire House
Home InSight

Job: Website Example
Date: 15 April 2012
By: Sam Young

3150 E Hwy 34, Ste 209-226, Newnan, GA 30265 Phone: [M] 404-915-5321 Email: SherlockHomes@HomeInSight.biz Web: www.GABuilderEnergyServices.com

Project Information

For: Georgia Builder, High Performance Home Builders
Greater Atlanta Metro Area, Peachtree City, GA 30271
Phone: 404-915-5321
Web: www.HomeInSight.biz

	Heating	Cooling
External static pressure	***0.50*** in H2O	***0.50*** in H2O
Pressure losses	0.23 in H2O	0.23 in H2O
Available static pressure	0.27 in H2O	0.27 in H2O
Supply / return available pressure	0.17 / 0.10 in H2O	0.17 / 0.10 in H2O
Lowest friction rate	0.093 in/100ft	0.093 in/100ft
Actual air flow	1000 cfm	1000 cfm
Total effective length (TEL)	289 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
Bedroom 2	c	1831	93	98	0.113	6.0	0x0	VlFx	30.0	120.0	st2
Bedroom 3	h	3167	106	95	0.112	6.0	0x0	VlFx	20.3	130.0	st2
Foyer	h	3029	101	81	0.116	6.0	0x0	VlFx	35.0	110.0	st2
Hall Bath	c	547	23	29	0.122	4.0	0x0	VlFx	3.5	135.0	st2
Kitchen	c	803	10	43	0.100	4.0	0x0	VlFx	34.6	135.0	st1
Kitchen-A	c	803	10	43	0.122	4.0	0x0	VlFx	14.0	125.0	st2
Laundry	c	1578	57	85	0.096	5.0	0x0	VlFx	55.2	120.0	st1
Living Room	h	4158	139	130	0.093	7.0	0x0	VlFx	51.0	130.0	st1
Living Room-A	h	4158	139	130	0.120	7.0	0x0	VlFx	26.3	115.0	st2
Master Bath	c	1604	68	86	0.114	5.0	0x0	VlFx	13.8	135.0	st1
Master Bedroom	h	3883	130	109	0.107	6.0	0x0	VlFx	42.3	115.0	st1
Master Hall	h	2939	98	56	0.102	5.0	0x0	VlFx	46.3	120.0	st1
WIC	h	768	26	14	0.119	4.0	0x0	VlFx	6.8	135.0	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
st2	Peak AVF	472	476	0.112	606	12.0	0 x 0	ShtMetl	
st1	Peak AVF	528	524	0.093	672	12.0	0 x 0	ShtMetl	

Bold/italic values have been manually overridden

Return Branch Detail Table

Name	Grill 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	14x 3	106	95	104.5	0.097	396	***7.0***	***0***x ***0***		VlFx	rt1
rb2	0x 0	93	98	108.4	0.093	368	***7.0***	***0***x ***0***		VlFx	rt1
rb3	0x 0	577	598	78.3	0.129	559	***14.0***	***0***x ***0***		VlFx	
rb1	0x 0	224	210	104.3	0.097	506	9.0	0x 0		VlFx	

Return Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
rt1	Peak AVF	199	193	0.093	570	8.0	0 x 0	VinlFlx	

Bold/italic values have been manually overridden