

Company Info

Name: [Comfort Services Inc.](#)

Address: [2296 NC Hwy 5](#)

Location: [Aberdeen , NC, 28315](#)

Phone: [910-695-2665](#)

Client Info

Building name/description:

Contact name: [Georgette Cousineau](#)

Address: [984 sierra trl](#)

Location: [Fayetteville, North Carolina, United States](#)

Phone:

Load Summary

Total building area: **1,404.0** SqFt

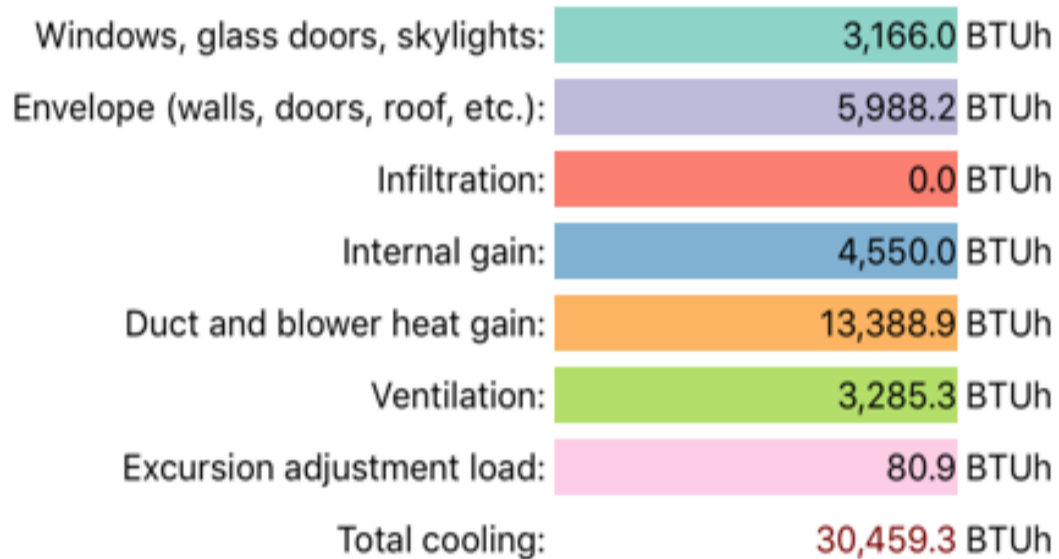
Total cooling load: **30,459.3** BTUh

Total cooling tonnage: **2.5** tons

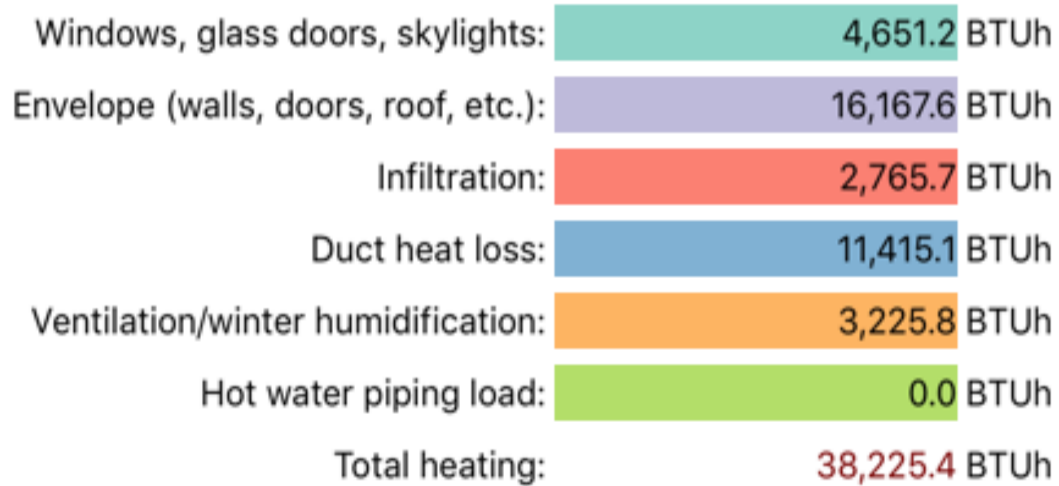
Total heating load: **38,225.4** BTUh

Total airflow: **1,439.0** CFM

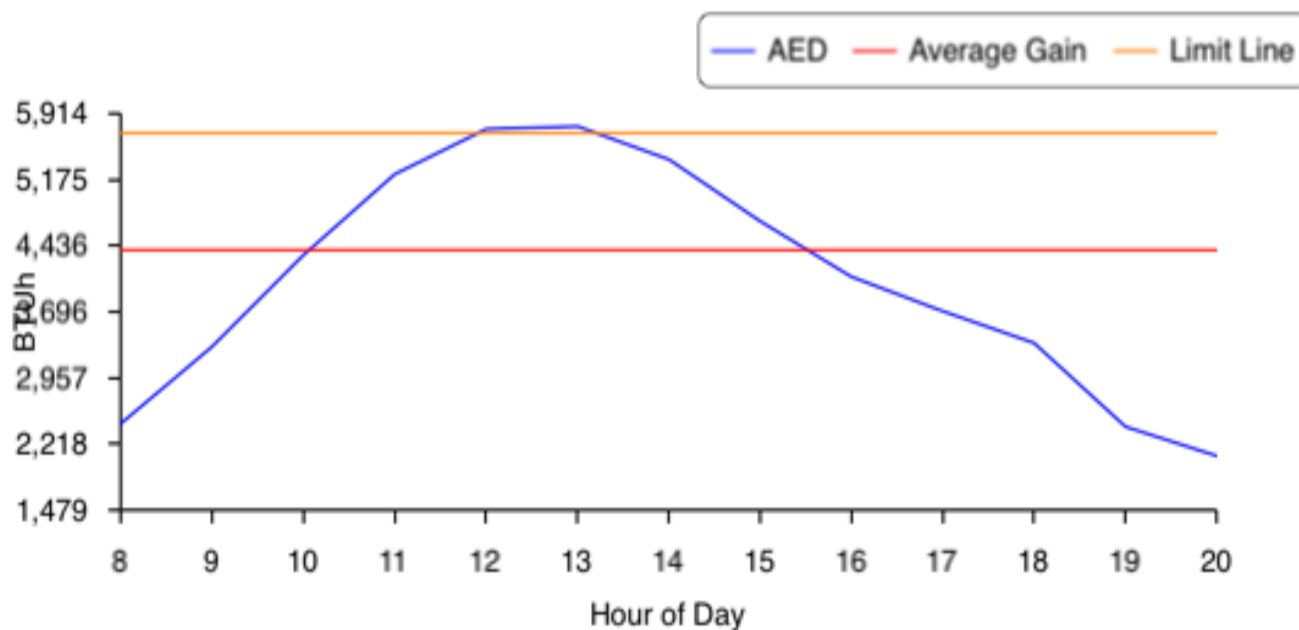
Project Load Breakdown - Cooling



Project Load Breakdown - Heating



Project AED Curve



ACCA-Approved Manual J8 Calculations **11:06:09 08-08-2019**

This software was developed by Carmel Software Corporation.
It has been approved by ACCA for Manual J8 residential HVAC load calculations.

System Load Summary

System description: [System 1](#)

Total building area:	1,404.0
Total cooling load:	30,459.3 BTUh
Total cooling tonnage:	2.5 tons
Total heating load:	38,225.4 BTUh
Total airflow:	1,439.0 CFM

System Block Load Breakdown - Cooling



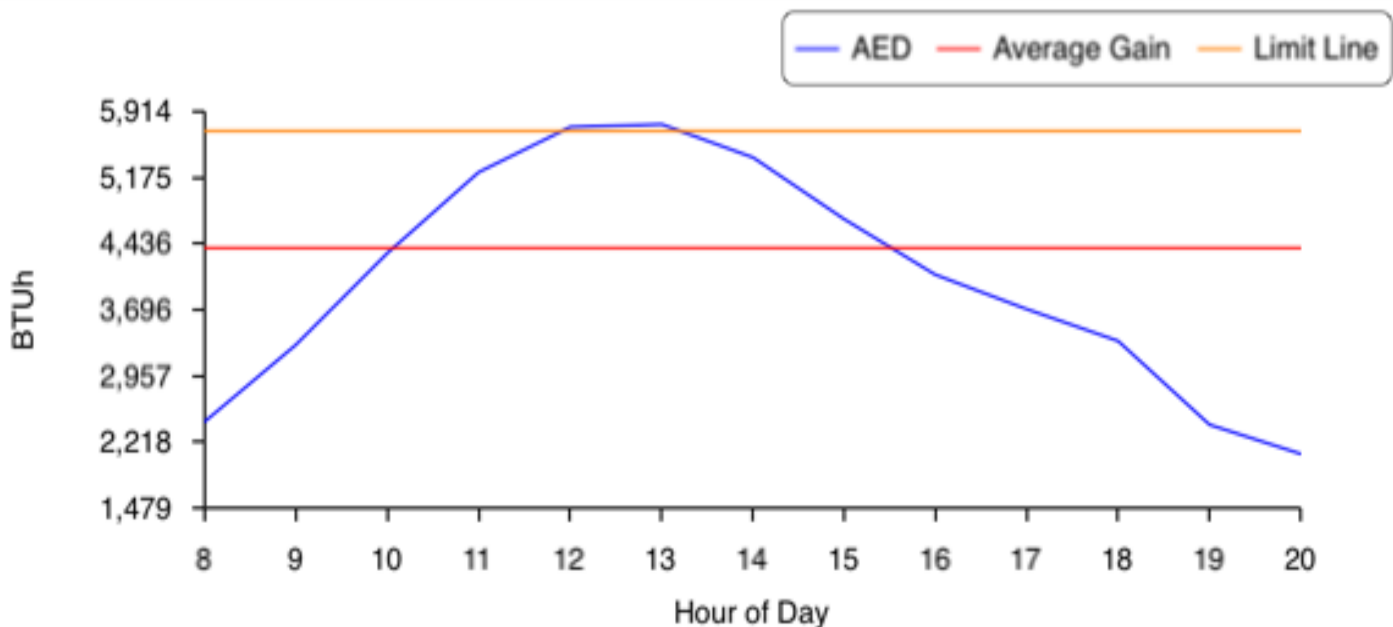
Windows, glass doors, skylights:	3,166.0 BTUh
Envelope (walls, doors, roof, etc.):	5,988.2 BTUh
Infiltration:	0.0 BTUh
Internal gain:	4,550.0 BTUh
Duct and blower heat gain:	13,388.9 BTUh
Ventilation:	3,285.3 BTUh
Excursion adjustment load:	80.9 BTUh
Total cooling:	30,459.3 BTUh

System Block Load Breakdown - Heating



Windows, glass doors, skylights:	4,651.2 BTUh
Envelope (walls, doors, roof, etc.):	16,167.6 BTUh
Infiltration:	2,765.7 BTUh
Duct heat loss:	11,415.1 BTUh
Ventilation/winter humidification:	3,225.8 BTUh
Hot water piping load:	0.0 BTUh
Total heating:	38,225.4 BTUh

System AED Curve



ACCA-Approved Manual J8 Calculations 11:06:09 08-08-2019

This software was developed by Carmel Software Corporation.
It has been approved by ACCA for Manual J8 residential HVAC load calculations.

System Checksums - Cooling

Total building area (SqFt):	1,404.0
Total building volume (CuFt):	11,232.0
Total cooling sensible load (BTUh):	26,732.7
Total cooling latent load (BTUh):	3,726.6
Total cooling load (BTUh):	30,459.3
Total tonnage (tons):	2.5
Total cooling infiltration airflow (CFM):	0.0
Total cooling ventilation airflow (CFM):	57.9
Total airflow (CFM):	1,439.0
Total infiltration air changes/hr (ACH):	0.00
Sensible heat coefficient (SHC):	1.09
Latent heat coefficient (LHC):	0.68
Cooling load density (BTUh/SqFt):	21.69
Cooling airflow density (CFM/SqFt):	1.02
Cooling airflow/load (CFM/Ton):	566.9
Cooling area/load (SqFt/Ton):	553.1

System Checksums - Heating

Total building area (SqFt):	1,404.0
Total building volume (CuFt):	11,232.0
Total heating load (BTUh):	38,225.4
Total airflow (CFM):	1,439.0
Total building air changes/hr (ACH):	7.69
Sensible heat coefficient (SHC):	1.09
Latent heat coefficient (LHC):	0.68
Heating load density (BTUh/SqFt):	27.2
Heating airflow density (CFM/SqFt):	1.02

ACCA-Approved Manual J8 Calculations 11:06:09 08-08-2019

This software was developed by Carmel Software Corporation.
It has been approved by ACCA for Manual J8 residential HVAC load calculations.

System Block Load Breakdown - Cooling

Description	Value	%
Windows and glass doors:	3,166.0	10.4%
Skylights:	0.0	0.0%
Wood and metal doors:	771.1	2.5%
Above grade walls:	3,100.6	10.2%
Partition walls:	0.0	0.0%
Below grade walls:	0.0	0.0%
Ceilings:	1,837.7	6.0%
Floors:	278.8	0.9%
Infiltration:	0.0	0.0%
Internal gain:	4,550.0	14.9%
Duct heat gain:	11,681.9	38.4%
Ventilation:	3,285.3	10.8%
Blower heat gain:	1,707.0	5.6%
Excursion adjustment load:	80.9	0.3%
Total cooling:	30,459.3	100%

System Block Load Breakdown - Heating

Description	Value	%
Windows and glass doors:	4,651.2	12.2%
Skylights:	0.0	0.0%
Wood and metal doors:	1,092.4	2.9%
Above grade walls:	5,474.2	14.3%
Partition walls:	0.0	0.0%
Below grade walls:	0.0	0.0%
Ceilings:	1,562.1	4.1%
Floors:	8,038.9	21.0%
Infiltration:	2,765.7	7.2%
Duct heat loss:	11,415.1	29.9%
Ventilation:	3,225.8	8.4%
Hot water piping load:	0.0	0.0%
Winter humidification load:	0.0	0.0%
Total heating:	38,225.4	100%

ACCA-Approved Manual J8 Calculations 11:06:09 08-08-2019

This software was developed by Carmel Software Corporation.
It has been approved by ACCA for Manual J8 residential HVAC load calculations.

Room Heating and Cooling Totals

Room Name	Cooling Load (BTUh)	Heating Load (BTUh)	Airflow (CFM)
A Room	0.0	0.0	0.0
Totals	0.0	0.0	0.0

ACCA-Approved Manual J8 Calculations 11:06:09 08-08-2019

This software was developed by Carmel Software Corporation.
It has been approved by ACCA for Manual J8 residential HVAC load calculations.

System Block Load Breakdown - Cooling



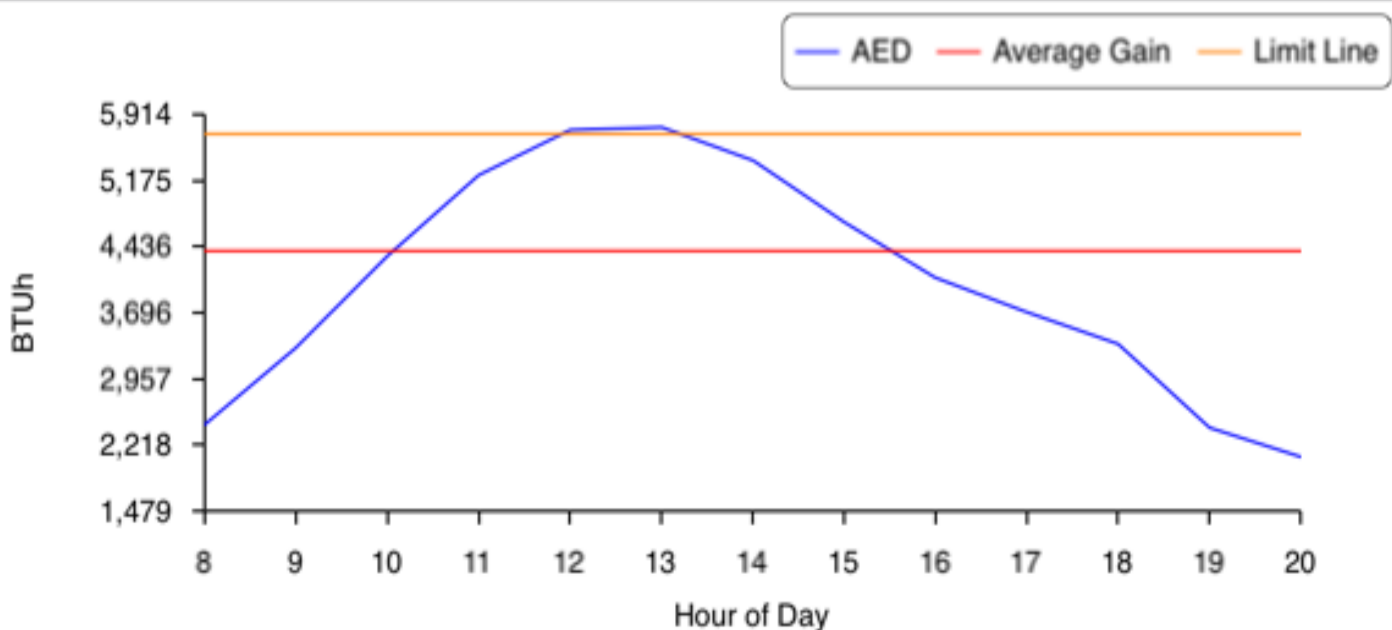
Windows, glass doors, skylights:	3,166.0 BTUh
Envelope (walls, doors, roof, etc.):	5,988.2 BTUh
Infiltration:	0.0 BTUh
Internal gain:	4,550.0 BTUh
Duct and blower heat gain:	13,388.9 BTUh
Ventilation:	3,285.3 BTUh
Excursion adjustment load:	80.9 BTUh
Total cooling:	30,459.3 BTUh

System Block Load Breakdown - Heating



Windows, glass doors, skylights:	4,651.2 BTUh
Envelope (walls, doors, roof, etc.):	16,167.6 BTUh
Infiltration:	2,765.7 BTUh
Duct heat loss:	11,415.1 BTUh
Ventilation/winter humidification:	3,225.8 BTUh
Hot water piping load:	0.0 BTUh
Total heating:	38,225.4 BTUh

System AED Curve



ACCA-Approved Manual J8 Calculations 11:06:09 08-08-2019

This software was developed by Carmel Software Corporation. It has been approved by ACCA for Manual J8 residential HVAC load calculations.