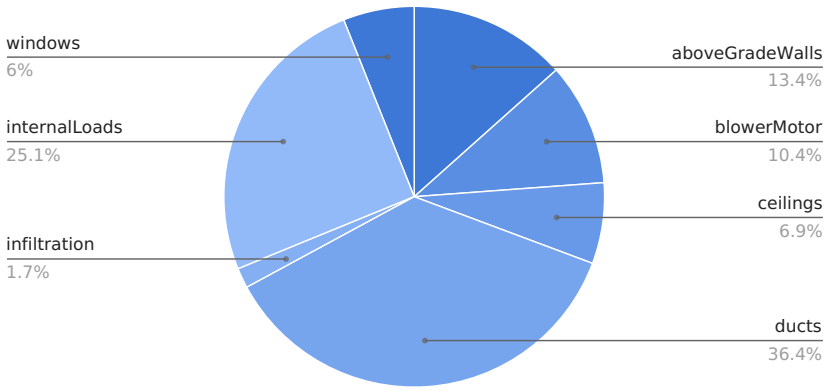
Project N[redacted]
Address:
FormType: HVAC System
HVAC System Name: Upstairs

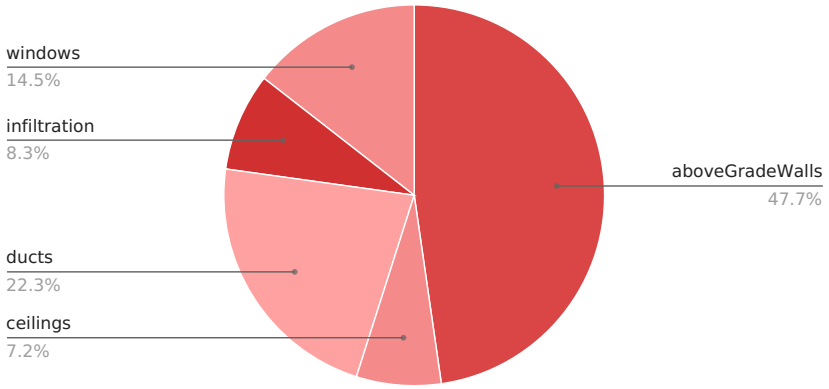
NORWALK, CT							
Summer Outdoor F:	84	Summer Indoor F:	75	Design Grains:	29	Daily Range:	Medium
Winter Outdoor F:	9	Winter Indoor F:	70	Cooling RH:	50%	Elevation (Ft):	397

LOAD CALCULATION TOTALS							
Heating BTU:	14703	Cooling BTU:	16387	SHR:	0.880	CFM:	725



Cooling Loads

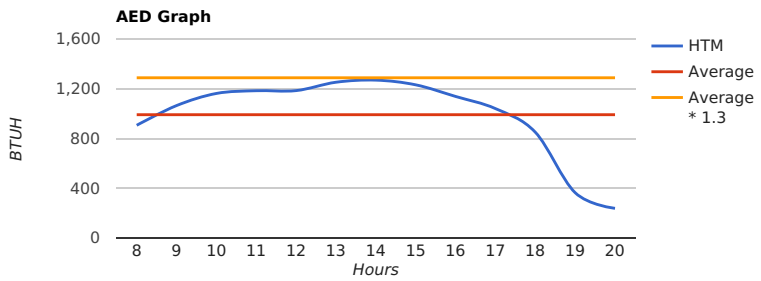
Name	Area	Sensible	Latent
AEDExcursion	0.00	0.00	0.00
aboveGradeWalls	1185.80	2196.93	0.00
belowGradeWalls	0.00	0.00	0.00
blowerMotor	0.00	1706.50	0.00
ceilings	456.00	1126.32	0.00
ducts	0.00	4935.98	1031.36
infiltration	0.00	93.64	186.53
internalLoads	0.00	3320.00	800.00
skylights	0.00	0.00	0.00
ventilation	0.00	0.00	0.00
windows	74.20	989.81	0.00
winterHumidification	0.00	0.00	0.00
Totals	-	14369.19	2017.89



Heating Loads

Name	Area	Heat Loss
AEDExcursion	0.00	0.00
aboveGradeWalls	1185.80	7016.38
belowGradeWalls	0.00	0.00
blowerMotor	0.00	0.00
ceilings	456.00	1057.01
ducts	0.00	3278.43
infiltration	0.00	1224.05
internalLoads	0.00	0.00
skylights	0.00	0.00
ventilation	0.00	0.00
windows	74.20	2127.31
winterHumidification	0.00	0.00
Totals	-	14703.18

AED Graph



Approved ACCA MJ8 Calculations

Calculations are based on the ACCA Manual J 8th Edition and are approved by ACCA. All computed calculations are estimates on building use, weather data, and inputted values such a R-Values, window types, duct loss, etc. Equipment selections should meet both the latent and sensible gain as well as building heat loss. See Cool Calc Manual S Report for equipment sizing verification.

Project Name: 308 west
Address: 308 West Avenue, Darien, CT
FormType: HVAC System
HVAC System Name: Upstairs

COMPONENT LOADS

Above Grade Walls

Construction Nr.	Exposure	Area	Heating HTM	Cooling HTM	Heating BTU	Sensible BTU	Latent BTU
12B-0s w	N	140.30	5.92	1.85	830.16	259.93	0.00
12B-0s w	W	125.30	5.92	1.85	741.40	232.14	0.00
12B-0s w	N	38.70	5.92	1.85	228.99	71.70	0.00
12B-0s w	N	140.30	5.92	1.85	830.16	259.93	0.00
12B-0s w	E	170.30	5.92	1.85	1007.67	315.51	0.00
12B-0s w	E	250.30	5.92	1.85	1481.03	463.73	0.00
12B-0s w	S	320.60	5.92	1.85	1896.99	593.98	0.00

Below Grade Walls

(none)

Blower Motor

Heating BTU	Sensible BTU	Latent BTU
0.00	1706.50	0.00

Ceilings

Construction Nr.	Area	Heating HTM	Cooling HTM	Heating BTU	Sensible BTU	Latent BTU
16A-25	90.00	2.32	2.47	208.62	222.30	0.00
16A-25	25.00	2.32	2.47	57.95	61.75	0.00
16A-25	120.00	2.32	2.47	278.16	296.40	0.00
16A-25	221.00	2.32	2.47	512.28	545.87	0.00

Ducts

EHLF	ESGF	ELG	Heating BTU	Sensible BTU	Latent BTU
0.29	0.52	1031.36	0.00	0.00	0.00

Infiltration

NCFM Heating	NCFM Cooling	Heating BTU	Sensible BTU	Latent BTU
18.47	9.58	1224.05	93.64	186.53

Internal Loads

Heating BTU	Sensible BTU	Latent BTU
0.00	920.00	800.00
0.00	2400.00	0.00

Ventilation

(none)

Windows

Construction Nr.	Exposure	Area	Heating HTM	Heating BTU	Sensible BTU Avg.	Sensible BTU Peak	Latent BTU
4A-5	N	9.70	28.67	278.10	70.86	97.49	0.00
4A-5	W	9.70	28.67	278.10	182.87	399.33	0.00
4A-5	N	6.30	28.67	180.62	46.02	63.32	0.00
4A-5	E	9.70	28.67	278.10	157.28	340.00	0.00
4A-5	N	9.70	28.67	278.10	70.86	97.49	0.00
4A-5	E	9.70	28.67	278.10	157.28	340.00	0.00
4A-5	S	19.40	28.67	556.20	304.63	557.86	0.00

Winter Humidification

(none)

Project Name: 308 west
Address: 308 West Avenue, Darien, CT
FormType: HVAC System
HVAC System Name: Upstairs

ROOM LOADS

Room Name	Heating	Sensible	Latent	Cooling	CFM
Baby	3363.13	1666.01	42.19	1708.21	84.00
bathroom	657.99	281.97	6.66	288.63	14.00
boy	3851.56	1797.62	48.85	1846.47	90.00
main bedroom	6830.49	3316.33	88.82	3405.15	167.00