

*Dunwood Crossing
HVAC Load Calculations*

for

Greenfire Management
3215 W State St. #200
Milwaukee WI. 53208

Prepared By:

Matt Bub
Dave Jones Inc
2225 Kilgust Road
Madison, WI. 53713
608-222-8490
Friday, November 03, 2017



Project Report

General Project Information

Project Title: Dunwood Crossing
 Designed By: HGA Architecture
 Project Date: 10-09-2017
 Client Name: Greenfire Management
 Client Address: 3215 W State St. #200
 Client City: Milwaukee WI. 53208
 Client Phone: 414-290-9400
 Company Name: Dave Jones Inc
 Company Representative: Matt Bub
 Company Address: 2225 Kilgust Road
 Company City: Madison, WI. 53713
 Company Phone: 608-222-8490
 Company Fax: 608-268-7581
 Company E-Mail Address: mbub@davejonesinc.com
 Company Website: www.davejonesinc.com

Design Data

Reference City: Milwaukee AP, Wisconsin
 Building Orientation: Front door faces South
 Daily Temperature Range: Medium
 Latitude: 43 Degrees
 Elevation: 723 ft.
 Altitude Factor: 0.974

	Outdoor Dry Bulb	Outdoor Wet Bulb	Outdoor Rel.Hum	Indoor Rel.Hum	Indoor Dry Bulb	Grains Difference
Winter:	-10	-2.63	n/a	n/a	70	n/a
Summer:	95	77	45%	50%	75	48

Check Figures

Total Building Supply CFM:	17,960	CFM Per Square ft.:	0.142
Square ft. of Room Area:	126,146	Square ft. Per Ton:	1,223
Volume (ft³) of Cond. Space:	1,135,314		

Building Loads

Total Heating Required Including Ventilation Air:	2,020,501 Btuh	2,020.501 MBH
Total Sensible Gain:	641,447 Btuh	52 %
Total Latent Gain:	595,999 Btuh	48 %
Total Cooling Required Including Ventilation Air:	1,237,446 Btuh	103.12 Tons (Based On Sensible + Latent)

Notes

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 Be sure to select a unit that meets both sensible and latent loads according to the manufacturer's performance data at your design conditions.



Total Building Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
P-Q 8'x11.41': Glazing-P-Q 8'x11.41' Door, u-value 0.29, SHGC 0.22	1004.1	23,298	0	21,598	21,598
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	2214	51,414	0	44,714	44,714
B 9.5'x8': Glazing-B 9.5'x8', u-value 0.29, SHGC 0.22	1520	35,260	0	31,984	31,984
N 7.41'x8': Glazing-N 7.41'x8' Door, u-value 0.29, SHGC 0.22	296	6,865	0	6,539	6,539
R 9.41'x8': Glazing-R 9.41'x8', u-value 0.29, SHGC 0.22	376.4	8,730	0	8,488	8,488
E 5.25'x4.66': Glazing-E 5.25'x4.66', u-value 0.29, SHGC 0.22	24.5	568	0	576	576
O 7.41'x8': Glazing-O 7.41'x8', u-value 0.29, SHGC 0.22	59.2	1,373	0	922	922
E1 5.33'x8': Glazing-E1 5.33'x8', u-value 0.29, SHGC 0.22	42.6	989	0	1,004	1,004
S2 3.33'x8': Glazing-E1 5.33'x8', u-value 0.29, SHGC 0.22	159.8	3,708	0	3,325	3,325
J 3'x7': Glazing-J 3'x7', u-value 0.29, SHGC 0.22	42	974	0	1,110	1,110
D 6.25'x6": Glazing-D 6.25'x6", u-value 0.29, SHGC 0.22	75	1,740	0	1,980	1,980
B150 6.25'x8": Glazing-150B 6.25'x8", u-value 0.29, SHGC 0.22	50	1,160	0	1,321	1,321
C 6.25'x8": Glazing-C 6.25'x8", u-value 0.29, SHGC 0.22	250	5,800	0	6,605	6,605
E2 6.58'x8': Glazing-E2 6.58'x8', u-value 0.29, SHGC 0.22	105.3	2,442	0	2,401	2,401
11J: Door-Metal - Fiberglass Core	143.2	5,154	0	2,664	2,664
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	13454.1	72,115	0	15,322	15,322
15B0-10s3-10: Wall-Basement, , R-10 board insulation to 3', no interior finish, 10' floor depth	27893.1	102,087	0	0	0
Steel Framed: Wall-Frame, Custom, Steel Framed	5	30	0	13	13
Roof R-30: Roof/Ceiling-Roof Deck (roofing, wood, insulation) or SIP Panels Supported on Beams, Custom, Roof With R-30 Entirely Above Deck	35587	91,103	0	30,749	30,749
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	25696.2	267,765	0	0	0
Slab On Grade R-10: Floor-Slab on grade, Custom, Slab On Grade R-10 Horizontal With Vertical 4'	2810	107,904	0	0	0
Subtotals for structure:		790,479	0	181,315	181,315
People:	88		17,600	20,240	37,840
Equipment:			24,900	50,800	75,700
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 2,348, Summer CFM: 1,248		201,319	40,039	26,736	66,775
Ventilation: Winter CFM: 16,000, Summer CFM: 16,000		1,028,703	513,460	342,901	856,361
AED Excursion:		0	0	19,455	19,455
Total Building Load Totals:		2,020,501	595,999	641,447	1,237,446

Check Figures

Total Building Supply CFM:	17,960	CFM Per Square ft.:	0.142
Square ft. of Room Area:	126,146	Square ft. Per Ton:	1,223
Volume (ft³) of Cond. Space:	1,135,314		

Building Loads

Total Heating Required Including Ventilation Air:	2,020,501	Btuh	2,020.501	MBH
Total Sensible Gain:	641,447	Btuh	52	%
Total Latent Gain:	595,999	Btuh	48	%
Total Cooling Required Including Ventilation Air:	1,237,446	Btuh	103.12	Tons (Based On Sensible + Latent)

Notes

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 Be sure to select a unit that meets both sensible and latent loads according to the manufacturer's performance data at your design conditions.



System 1 Unit 1A 102B Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
P-Q 8'x11.41': Glazing-P-Q 8'x11.41' Door, u-value 0.29, SHGC 0.22	91.3	2,118	0	1,421	1,421
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	36	836	0	560	560
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	206.4	1,106	0	235	235
Roof R-30: Roof/Ceiling-Roof Deck (roofing, wood, insulation) or SIP Panels Supported on Beams, Custom, Roof With R-30 Entirely Above Deck	823	2,107	0	711	711
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	427.8	4,458	0	0	0
Subtotals for structure:		10,625	0	2,927	2,927
People:	3		600	690	1,290
Equipment:			750	1,500	2,250
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 40, Summer CFM: 21		3,386	673	450	1,123
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
AED Excursion:		0	0	395	395
System 1 Unit 1A 102B Load Totals:		14,011	2,023	5,962	7,985

Check Figures

Supply CFM:	278	CFM Per Square ft.:	0.338
Square ft. of Room Area:	823	Square ft. Per Ton:	1,237
Volume (ft ³) of Cond. Space:	7,407		

System Loads

Total Heating Required Including Ventilation Air:	14,011 Btuh	14.011 MBH
Total Sensible Gain:	5,962 Btuh	75 %
Total Latent Gain:	2,023 Btuh	25 %
Total Cooling Required Including Ventilation Air:	7,985 Btuh	0.67 Tons (Based On Sensible + Latent)

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System 2 Unit 1B.1 104A Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
P-Q 8'x11.41': Glazing-P-Q 8'x11.41' Door, u-value 0.29, SHGC 0.22	91.3	2,118	0	2,411	2,411
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	36	836	0	950	950
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	197.1	1,057	0	225	225
Roof R-30: Roof/Ceiling-Roof Deck (roofing, wood, insulation) or SIP Panels Supported on Beams, Custom, Roof With R-30 Entirely Above Deck	894	2,289	0	772	772
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	445.8	4,646	0	0	0
Subtotals for structure:		10,946	0	4,358	4,358
People:	3		600	690	1,290
Equipment:			750	1,500	2,250
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 43, Summer CFM: 23		3,679	732	489	1,221
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
AED Excursion:		0	0	375	375
System 2 Unit 1B.1 104A Load Totals:		14,625	2,082	7,412	9,494

Check Figures

Supply CFM:	346	CFM Per Square ft.:	0.387
Square ft. of Room Area:	894	Square ft. Per Ton:	1,130
Volume (ft³) of Cond. Space:	8,046		

System Loads

Total Heating Required Including Ventilation Air:	14,625 Btuh	14.625 MBH
Total Sensible Gain:	7,412 Btuh	78 %
Total Latent Gain:	2,082 Btuh	22 %
Total Cooling Required Including Ventilation Air:	9,494 Btuh	0.79 Tons (Based On Sensible + Latent)

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System 3 Unit 1B.2 106A Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
P-Q 8'x11.41': Glazing-P-Q 8'x11.41' Door, u-value 0.29, SHGC 0.22	91.3	2,118	0	2,149	2,149
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	36	836	0	848	848
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	287.9	1,543	0	328	328
Roof R-30: Roof/Ceiling-Roof Deck (roofing, wood, insulation) or SIP Panels Supported on Beams, Custom, Roof With R-30 Entirely Above Deck	960	2,458	0	829	829
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	445.8	4,646	0	0	0
Subtotals for structure:		11,601	0	4,154	4,154
People:	3		600	690	1,290
Equipment:			750	1,500	2,250
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 46, Summer CFM: 24		3,950	785	524	1,309
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
AED Excursion:		0	0	283	283
System 3 Unit 1B.2 106A Load Totals:		15,551	2,135	7,151	9,286

Check Figures

Supply CFM:	334	CFM Per Square ft.:	0.348
Square ft. of Room Area:	960	Square ft. Per Ton:	1,241
Volume (ft ³) of Cond. Space:	8,640		

System Loads

Total Heating Required Including Ventilation Air:	15,551 Btuh	15.551 MBH
Total Sensible Gain:	7,151 Btuh	77 %
Total Latent Gain:	2,135 Btuh	23 %
Total Cooling Required Including Ventilation Air:	9,286 Btuh	0.77 Tons (Based On Sensible + Latent)

Notes

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System 4 Unit 2A 207B Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
P-Q 8'x11.41': Glazing-P-Q 8'x11.41' Door, u-value 0.29, SHGC 0.22	91.3	2,118	0	2,149	2,149
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	72	1,672	0	1,696	1,696
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	342.6	1,837	0	390	390
Roof R-30: Roof/Ceiling-Roof Deck (roofing, wood, insulation) or SIP Panels Supported on Beams, Custom, Roof With R-30 Entirely Above Deck	1298	3,323	0	1,122	1,122
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	675.8	7,043	0	0	0
Subtotals for structure:		15,993	0	5,357	5,357
People:	4		800	920	1,720
Equipment:			1,000	2,000	3,000
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 62, Summer CFM: 33		5,340	1,062	709	1,771
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
AED Excursion:		0	0	1,344	1,344
System 4 Unit 2A 207B Load Totals:		21,333	2,862	10,330	13,192

Check Figures

Supply CFM:	482	CFM Per Square ft.:	0.371
Square ft. of Room Area:	1,298	Square ft. Per Ton:	1,181
Volume (ft ³) of Cond. Space:	11,682		

System Loads

Total Heating Required Including Ventilation Air:	21,333 Btuh	21.333 MBH
Total Sensible Gain:	10,330 Btuh	78 %
Total Latent Gain:	2,862 Btuh	22 %
Total Cooling Required Including Ventilation Air:	13,192 Btuh	1.10 Tons (Based On Sensible + Latent)

Notes

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System 5 Unit 2A.1 102A Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
P-Q 8'x11.41': Glazing-P-Q 8'x11.41' Door, u-value 0.29, SHGC 0.22	91.3	2,118	0	2,149	2,149
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	72	1,672	0	1,696	1,696
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	310.5	1,664	0	354	354
Roof R-30: Roof/Ceiling-Roof Deck (roofing, wood, insulation) or SIP Panels Supported on Beams, Custom, Roof With R-30 Entirely Above Deck	1297	3,321	0	1,121	1,121
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	676.8	7,053	0	0	0
Subtotals for structure:		15,828	0	5,320	5,320
People:	4		800	920	1,720
Equipment:			1,000	2,000	3,000
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 62, Summer CFM: 33		5,337	1,061	709	1,770
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
AED Excursion:		0	0	1,344	1,344
System 5 Unit 2A.1 102A Load Totals:		21,165	2,861	10,293	13,154

Check Figures

Supply CFM:	480	CFM Per Square ft.:	0.370
Square ft. of Room Area:	1,297	Square ft. Per Ton:	1,183
Volume (ft ³) of Cond. Space:	11,673		

System Loads

Total Heating Required Including Ventilation Air:	21,165 Btuh	21.165 MBH
Total Sensible Gain:	10,293 Btuh	78 %
Total Latent Gain:	2,861 Btuh	22 %
Total Cooling Required Including Ventilation Air:	13,154 Btuh	1.10 Tons (Based On Sensible + Latent)

Notes

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System 6 Unit 2A.2 105C Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
P-Q 8'x11.41': Glazing-P-Q 8'x11.41' Door, u-value 0.29, SHGC 0.22	91.3	2,118	0	912	912
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	90	2,090	0	900	900
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	408	2,187	0	464	464
Roof R-30: Roof/Ceiling-Roof Deck (roofing, wood, insulation) or SIP Panels Supported on Beams, Custom, Roof With R-30 Entirely Above Deck	1423	3,642	0	1,230	1,230
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	798.8	8,324	0	0	0
Subtotals for structure:		18,361	0	3,506	3,506
People:	4		800	920	1,720
Equipment:			1,000	2,000	3,000
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 68, Summer CFM: 36		5,855	1,164	778	1,942
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
System 6 Unit 2A.2 105C Load Totals:		24,216	2,964	7,204	10,168

Check Figures

Supply CFM:	336	CFM Per Square ft.:	0.236
Square ft. of Room Area:	1,423	Square ft. Per Ton:	1,679
Volume (ft ³) of Cond. Space:	12,807		

System Loads

Total Heating Required Including Ventilation Air:	24,216 Btuh	24.216 MBH
Total Sensible Gain:	7,204 Btuh	71 %
Total Latent Gain:	2,964 Btuh	29 %
Total Cooling Required Including Ventilation Air:	10,168 Btuh	0.85 Tons (Based On Sensible + Latent)

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System 7 Unit 2B 109A Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
P-Q 8'x11.41': Glazing-P-Q 8'x11.41' Door, u-value 0.29, SHGC 0.22	91.3	2,118	0	1,753	1,753
B 9.5'x8': Glazing-B 9.5'x8', u-value 0.29, SHGC 0.22	152	3,526	0	2,918	2,918
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	72	1,672	0	1,384	1,384
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	608.7	3,263	0	693	693
Roof R-30: Roof/Ceiling-Roof Deck (roofing, wood, insulation) or SIP Panels Supported on Beams, Custom, Roof With R-30 Entirely Above Deck	1452	3,717	0	1,255	1,255
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	602.8	6,282	0	0	0
Subtotals for structure:		20,578	0	8,003	8,003
People:	4		800	920	1,720
Equipment:			1,000	2,000	3,000
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 70, Summer CFM: 37		5,975	1,188	793	1,981
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
AED Excursion:		0	0	486	486
System 7 Unit 2B 109A Load Totals:		26,553	2,988	12,202	15,190

Check Figures

Supply CFM:	569	CFM Per Square ft.:	0.392
Square ft. of Room Area:	1,452	Square ft. Per Ton:	1,147
Volume (ft³) of Cond. Space:	13,068		

System Loads

Total Heating Required Including Ventilation Air:	26,553 Btuh	26.553 MBH
Total Sensible Gain:	12,202 Btuh	80 %
Total Latent Gain:	2,988 Btuh	20 %
Total Cooling Required Including Ventilation Air:	15,190 Btuh	1.27 Tons (Based On Sensible + Latent)

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System 8 Unit 2C 106D Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
P-Q 8'x11.41': Glazing-P-Q 8'x11.41' Door, u-value 0.29, SHGC 0.22	91.3	2,118	0	2,411	2,411
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	72	1,672	0	1,900	1,900
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	343.6	1,842	0	391	391
Roof R-30: Roof/Ceiling-Roof Deck (roofing, wood, insulation) or SIP Panels Supported on Beams, Custom, Roof With R-30 Entirely Above Deck	1355	3,469	0	1,170	1,170
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	567.8	5,917	0	0	0
Subtotals for structure:		15,018	0	5,872	5,872
People:	4		800	920	1,720
Equipment:			1,000	2,000	3,000
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 65, Summer CFM: 35		5,576	1,109	740	1,849
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
AED Excursion:		0	0	481	481
System 8 Unit 2C 106D Load Totals:		20,594	2,909	10,013	12,922

Check Figures

Supply CFM:	467	CFM Per Square ft.:	0.345
Square ft. of Room Area:	1,355	Square ft. Per Ton:	1,258
Volume (ft ³) of Cond. Space:	12,195		

System Loads

Total Heating Required Including Ventilation Air:	20,594 Btuh	20.594 MBH
Total Sensible Gain:	10,013 Btuh	77 %
Total Latent Gain:	2,909 Btuh	23 %
Total Cooling Required Including Ventilation Air:	12,922 Btuh	1.08 Tons (Based On Sensible + Latent)

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System 9 Unit 2D 102D Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
B 9.5'x8': Glazing-B 9.5'x8', u-value 0.29, SHGC 0.22	76	1,763	0	1,459	1,459
N 7.41'x8': Glazing-N 7.41'x8' Door, u-value 0.29, SHGC 0.22	59.2	1,373	0	1,137	1,137
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	90	2,090	0	1,730	1,730
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	435.7	2,335	0	496	496
Roof R-30: Roof/Ceiling-Roof Deck (roofing, wood, insulation) or SIP Panels Supported on Beams, Custom, Roof With R-30 Entirely Above Deck	1587	4,063	0	1,372	1,372
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	686.8	7,157	0	0	0
Subtotals for structure:		18,781	0	6,194	6,194
People:	4		800	920	1,720
Equipment:			1,000	2,000	3,000
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 76, Summer CFM: 40		6,530	1,298	867	2,165
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
System 9 Unit 2D 102D Load Totals:		25,311	3,098	9,981	13,079

Check Figures

Supply CFM:	466	CFM Per Square ft.:	0.293
Square ft. of Room Area:	1,587	Square ft. Per Ton:	1,456
Volume (ft ³) of Cond. Space:	14,283		

System Loads

Total Heating Required Including Ventilation Air:	25,311 Btuh	25.311 MBH
Total Sensible Gain:	9,981 Btuh	76 %
Total Latent Gain:	3,098 Btuh	24 %
Total Cooling Required Including Ventilation Air:	13,079 Btuh	1.09 Tons (Based On Sensible + Latent)

Notes

Rhvac is an ACCA approved Manual J and Manual D computer program. Calculations are performed per ACCA Manual J 8th Edition, Version 2, and ACCA Manual D. All computed results are estimates as building use and weather may vary. Be sure to select a unit that meets both sensible and latent loads according to the manufacturer's performance data at your design conditions.



System 10 Unit 2E 100C Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
B 9.5'x8': Glazing-B 9.5'x8', u-value 0.29, SHGC 0.22	152	3,526	0	3,190	3,190
P-Q 8'x11.41': Glazing-P-Q 8'x11.41' Door, u-value 0.29, SHGC 0.22	91.3	2,118	0	1,421	1,421
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	72	1,672	0	1,510	1,510
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	629.7	3,375	0	717	717
Roof R-30: Roof/Ceiling-Roof Deck (roofing, wood, insulation) or SIP Panels Supported on Beams, Custom, Roof With R-30 Entirely Above Deck	1479	3,787	0	1,278	1,278
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	714.8	7,448	0	0	0
Subtotals for structure:		21,926	0	8,116	8,116
People:	4		800	920	1,720
Equipment:			1,000	2,000	3,000
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 71, Summer CFM: 38		6,086	1,210	808	2,018
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
AED Excursion:		0	0	378	378
System 10 Unit 2E 100C Load Totals:		28,012	3,010	12,222	15,232

Check Figures

Supply CFM:	570	CFM Per Square ft.:	0.386
Square ft. of Room Area:	1,479	Square ft. Per Ton:	1,165
Volume (ft³) of Cond. Space:	13,311		

System Loads

Total Heating Required Including Ventilation Air:	28,012 Btuh	28.012 MBH
Total Sensible Gain:	12,222 Btuh	80 %
Total Latent Gain:	3,010 Btuh	20 %
Total Cooling Required Including Ventilation Air:	15,232 Btuh	1.27 Tons (Based On Sensible + Latent)

Notes

Rhvac is an ACCA approved Manual J and Manual D computer program. Calculations are performed per ACCA Manual J 8th Edition, Version 2, and ACCA Manual D. All computed results are estimates as building use and weather may vary. Be sure to select a unit that meets both sensible and latent loads according to the manufacturer's performance data at your design conditions.



System 11 Unit 2F 101B Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
R 9.41'x8': Glazing-R 9.41'x8', u-value 0.29, SHGC 0.22	75.3	1,746	0	1,988	1,988
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	36	836	0	950	950
B 9.5'x8': Glazing-B 9.5'x8', u-value 0.29, SHGC 0.22	152	3,526	0	3,190	3,190
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	596.4	3,196	0	679	679
Roof R-30: Roof/Ceiling-Roof Deck (roofing, wood, insulation) or SIP Panels Supported on Beams, Custom, Roof With R-30 Entirely Above Deck	1450	3,712	0	1,253	1,253
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	746.8	7,783	0	0	0
Subtotals for structure:		20,799	0	8,060	8,060
People:	4		800	920	1,720
Equipment:			1,000	2,000	3,000
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 70, Summer CFM: 37		5,966	1,188	792	1,980
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
AED Excursion:		0	0	1,766	1,766
System 11 Unit 2F 101B Load Totals:		26,765	2,988	13,538	16,526

Check Figures

Supply CFM:	632	CFM Per Square ft.:	0.436
Square ft. of Room Area:	1,450	Square ft. Per Ton:	1,053
Volume (ft ³) of Cond. Space:	13,050		

System Loads

Total Heating Required Including Ventilation Air:	26,765 Btuh	26.765 MBH
Total Sensible Gain:	13,538 Btuh	82 %
Total Latent Gain:	2,988 Btuh	18 %
Total Cooling Required Including Ventilation Air:	16,526 Btuh	1.38 Tons (Based On Sensible + Latent)

Notes

Rhvac is an ACCA approved Manual J and Manual D computer program. Calculations are performed per ACCA Manual J 8th Edition, Version 2, and ACCA Manual D. All computed results are estimates as building use and weather may vary. Be sure to select a unit that meets both sensible and latent loads according to the manufacturer's performance data at your design conditions.



System 12 Unit 2G 104B Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	108	2,508	0	2,334	2,334
B 9.5'x8': Glazing-B 9.5'x8', u-value 0.29, SHGC 0.22	76	1,763	0	2,007	2,007
N 7.41'x8': Glazing-N 7.41'x8' Door, u-value 0.29, SHGC 0.22	59.2	1,373	0	1,564	1,564
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	530.7	2,845	0	605	605
Roof R-30: Roof/Ceiling-Roof Deck (roofing, wood, insulation) or SIP Panels Supported on Beams, Custom, Roof With R-30 Entirely Above Deck	1512	3,870	0	1,307	1,307
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	610.8	6,366	0	0	0
Subtotals for structure:		18,725	0	7,817	7,817
People:	4		800	920	1,720
Equipment:			1,000	2,000	3,000
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 73, Summer CFM: 39		6,222	1,237	827	2,064
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
AED Excursion:		0	0	383	383
System 12 Unit 2G 104B Load Totals:		24,947	3,037	11,947	14,984

Check Figures

Supply CFM:	557	CFM Per Square ft.:	0.369
Square ft. of Room Area:	1,512	Square ft. Per Ton:	1,211
Volume (ft³) of Cond. Space:	13,608		

System Loads

Total Heating Required Including Ventilation Air:	24,947 Btuh	24.947 MBH
Total Sensible Gain:	11,947 Btuh	80 %
Total Latent Gain:	3,037 Btuh	20 %
Total Cooling Required Including Ventilation Air:	14,984 Btuh	1.25 Tons (Based On Sensible + Latent)

Notes

Rhvac is an ACCA approved Manual J and Manual D computer program. Calculations are performed per ACCA Manual J 8th Edition, Version 2, and ACCA Manual D. All computed results are estimates as building use and weather may vary. Be sure to select a unit that meets both sensible and latent loads according to the manufacturer's performance data at your design conditions.



System 13 Unit 2H 105D Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	126	2,926	0	3,070	3,070
R 9.41'x8': Glazing-R 9.41'x8', u-value 0.29, SHGC 0.22	75.3	1,746	0	1,988	1,988
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	451.2	2,419	0	515	515
Roof R-30: Roof/Ceiling-Roof Deck (roofing, wood, insulation) or SIP Panels Supported on Beams, Custom, Roof With R-30 Entirely Above Deck	1361	3,485	0	1,176	1,176
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	608.8	6,344	0	0	0
Subtotals for structure:		16,920	0	6,749	6,749
People:	4		800	920	1,720
Equipment:			1,000	2,000	3,000
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 65, Summer CFM: 35		5,600	1,113	744	1,857
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
AED Excursion:		0	0	2,042	2,042
System 13 Unit 2H 105D Load Totals:		22,520	2,913	12,455	15,368

Check Figures

Supply CFM:	581	CFM Per Square ft.:	0.427
Square ft. of Room Area:	1,361	Square ft. Per Ton:	1,063
Volume (ft ³) of Cond. Space:	12,249		

System Loads

Total Heating Required Including Ventilation Air:	22,520 Btuh	22.520 MBH
Total Sensible Gain:	12,455 Btuh	81 %
Total Latent Gain:	2,913 Btuh	19 %
Total Cooling Required Including Ventilation Air:	15,368 Btuh	1.28 Tons (Based On Sensible + Latent)

Notes

Rhvac is an ACCA approved Manual J and Manual D computer program. Calculations are performed per ACCA Manual J 8th Edition, Version 2, and ACCA Manual D. All computed results are estimates as building use and weather may vary. Be sure to select a unit that meets both sensible and latent loads according to the manufacturer's performance data at your design conditions.



System 14 Unit 2J 105A Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
P-Q 8'x11.41': Glazing-P-Q 8'x11.41' Door, u-value 0.29, SHGC 0.22	91.3	2,118	0	2,411	2,411
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	126	2,926	0	2,938	2,938
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	489.2	2,622	0	557	557
Roof R-30: Roof/Ceiling-Roof Deck (roofing, wood, insulation) or SIP Panels Supported on Beams, Custom, Roof With R-30 Entirely Above Deck	1481	3,791	0	1,279	1,279
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	743.8	7,751	0	0	0
Subtotals for structure:		19,208	0	7,185	7,185
People:	5		1,000	1,150	2,150
Equipment:			1,250	2,500	3,750
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 71, Summer CFM: 38		6,095	1,211	808	2,019
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
AED Excursion:		0	0	2,291	2,291
System 14 Unit 2J 105A Load Totals:		25,303	3,461	13,934	17,395

Check Figures

Supply CFM:	650	CFM Per Square ft.:	0.439
Square ft. of Room Area:	1,481	Square ft. Per Ton:	1,022
Volume (ft ³) of Cond. Space:	13,329		

System Loads

Total Heating Required Including Ventilation Air:	25,303 Btuh	25.303 MBH
Total Sensible Gain:	13,934 Btuh	80 %
Total Latent Gain:	3,461 Btuh	20 %
Total Cooling Required Including Ventilation Air:	17,395 Btuh	1.45 Tons (Based On Sensible + Latent)

Notes

Rhvac is an ACCA approved Manual J and Manual D computer program. Calculations are performed per ACCA Manual J 8th Edition, Version 2, and ACCA Manual D. All computed results are estimates as building use and weather may vary. Be sure to select a unit that meets both sensible and latent loads according to the manufacturer's performance data at your design conditions.



System 15 Unit 2K 101D Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
B 9.5'x8': Glazing-B 9.5'x8', u-value 0.29, SHGC 0.22	152	3,526	0	3,578	3,578
R 9.41'x8': Glazing-R 9.41'x8', u-value 0.29, SHGC 0.22	75.3	1,746	0	1,772	1,772
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	72	1,672	0	1,696	1,696
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	624.7	3,349	0	712	712
Roof R-30: Roof/Ceiling-Roof Deck (roofing, wood, insulation) or SIP Panels Supported on Beams, Custom, Roof With R-30 Entirely Above Deck	1454	3,723	0	1,256	1,256
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	687.8	7,167	0	0	0
Subtotals for structure:		21,183	0	9,014	9,014
People:	4		800	920	1,720
Equipment:			1,000	2,000	3,000
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 70, Summer CFM: 37		5,983	1,191	795	1,986
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
AED Excursion:		0	0	241	241
System 15 Unit 2K 101D Load Totals:		27,166	2,991	12,970	15,961

Check Figures

Supply CFM:	605	CFM Per Square ft.:	0.416
Square ft. of Room Area:	1,454	Square ft. Per Ton:	1,093
Volume (ft ³) of Cond. Space:	13,086		

System Loads

Total Heating Required Including Ventilation Air:	27,166 Btuh	27.166 MBH
Total Sensible Gain:	12,970 Btuh	81 %
Total Latent Gain:	2,991 Btuh	19 %
Total Cooling Required Including Ventilation Air:	15,961 Btuh	1.33 Tons (Based On Sensible + Latent)

Notes

Rhvac is an ACCA approved Manual J and Manual D computer program. Calculations are performed per ACCA Manual J 8th Edition, Version 2, and ACCA Manual D. All computed results are estimates as building use and weather may vary. Be sure to select a unit that meets both sensible and latent loads according to the manufacturer's performance data at your design conditions.



System 16 Unit 3A.1 108A Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
B 9.5'x8': Glazing-B 9.5'x8', u-value 0.29, SHGC 0.22	152	3,526	0	3,248	3,248
N 7.41'x8': Glazing-N 7.41'x8' Door, u-value 0.29, SHGC 0.22	59.2	1,373	0	1,137	1,137
E 5.25'x4.66': Glazing-E 5.25'x4.66', u-value 0.29, SHGC 0.22	24.5	568	0	576	576
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	108	2,508	0	2,388	2,388
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	644.4	3,454	0	733	733
Roof R-30: Roof/Ceiling-Roof Deck (roofing, wood, insulation) or SIP Panels Supported on Beams, Custom, Roof With R-30 Entirely Above Deck	1713	4,385	0	1,480	1,480
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	856.8	8,929	0	0	0
Subtotals for structure:		24,743	0	9,562	9,562
People:	5		1,000	1,150	2,150
Equipment:			1,250	2,500	3,750
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 82, Summer CFM: 44		7,049	1,402	937	2,339
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
System 16 Unit 3A.1 108A Load Totals:		31,792	3,652	14,149	17,801

Check Figures

Supply CFM:	660	CFM Per Square ft.:	0.385
Square ft. of Room Area:	1,713	Square ft. Per Ton:	1,155
Volume (ft³) of Cond. Space:	15,417		

System Loads

Total Heating Required Including Ventilation Air:	31,792 Btuh	31.792 MBH
Total Sensible Gain:	14,149 Btuh	79 %
Total Latent Gain:	3,652 Btuh	21 %
Total Cooling Required Including Ventilation Air:	17,801 Btuh	1.48 Tons (Based On Sensible + Latent)

Notes

Rhvac is an ACCA approved Manual J and Manual D computer program. Calculations are performed per ACCA Manual J 8th Edition, Version 2, and ACCA Manual D. All computed results are estimates as building use and weather may vary. Be sure to select a unit that meets both sensible and latent loads according to the manufacturer's performance data at your design conditions.



System 17 Unit 3A.2 100A Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
B 9.5'x8': Glazing-B 9.5'x8', u-value 0.29, SHGC 0.22	152	3,526	0	3,248	3,248
N 7.41'x8': Glazing-N 7.41'x8' Door, u-value 0.29, SHGC 0.22	59.2	1,373	0	1,137	1,137
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	108	2,508	0	2,232	2,232
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	678.9	3,638	0	772	772
Roof R-30: Roof/Ceiling-Roof Deck (roofing, wood, insulation) or SIP Panels Supported on Beams, Custom, Roof With R-30 Entirely Above Deck	1716	4,393	0	1,482	1,482
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	857.8	8,939	0	0	0
Subtotals for structure:		24,377	0	8,871	8,871
People:	5		1,000	1,150	2,150
Equipment:			1,250	2,500	3,750
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 82, Summer CFM: 44		7,062	1,405	938	2,343
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
System 17 Unit 3A.2 100A Load Totals:		31,439	3,655	13,459	17,114

Check Figures

Supply CFM:	628	CFM Per Square ft.:	0.366
Square ft. of Room Area:	1,716	Square ft. Per Ton:	1,203
Volume (ft ³) of Cond. Space:	15,444		

System Loads

Total Heating Required Including Ventilation Air:	31,439 Btuh	31.439 MBH
Total Sensible Gain:	13,459 Btuh	79 %
Total Latent Gain:	3,655 Btuh	21 %
Total Cooling Required Including Ventilation Air:	17,114 Btuh	1.43 Tons (Based On Sensible + Latent)

Notes

Rhvac is an ACCA approved Manual J and Manual D computer program. Calculations are performed per ACCA Manual J 8th Edition, Version 2, and ACCA Manual D. All computed results are estimates as building use and weather may vary. Be sure to select a unit that meets both sensible and latent loads according to the manufacturer's performance data at your design conditions.



System 18 Unit 3B 110C Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
B 9.5'x8': Glazing-B 9.5'x8', u-value 0.29, SHGC 0.22	152	3,526	0	3,190	3,190
O 7.41'x8': Glazing-O 7.41'x8', u-value 0.29, SHGC 0.22	59.2	1,373	0	922	922
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	108	2,508	0	2,070	2,070
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	699.2	3,747	0	796	796
Roof R-30: Roof/Ceiling-Roof Deck (roofing, wood, insulation) or SIP Panels Supported on Beams, Custom, Roof With R-30 Entirely Above Deck	1775	4,544	0	1,533	1,533
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	883.8	9,210	0	0	0
Subtotals for structure:		24,908	0	8,511	8,511
People:	5		1,000	1,150	2,150
Equipment:			1,250	2,500	3,750
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 85, Summer CFM: 45		7,304	1,452	970	2,422
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
System 18 Unit 3B 110C Load Totals:		32,212	3,702	13,131	16,833

Check Figures

Supply CFM:	613	CFM Per Square ft.:	0.345
Square ft. of Room Area:	1,775	Square ft. Per Ton:	1,265
Volume (ft ³) of Cond. Space:	15,975		

System Loads

Total Heating Required Including Ventilation Air:	32,212 Btuh	32.212 MBH
Total Sensible Gain:	13,131 Btuh	78 %
Total Latent Gain:	3,702 Btuh	22 %
Total Cooling Required Including Ventilation Air:	16,833 Btuh	1.40 Tons (Based On Sensible + Latent)

Notes

Rhvac is an ACCA approved Manual J and Manual D computer program. Calculations are performed per ACCA Manual J 8th Edition, Version 2, and ACCA Manual D. All computed results are estimates as building use and weather may vary. Be sure to select a unit that meets both sensible and latent loads according to the manufacturer's performance data at your design conditions.



System 19 Unit 3C 101A Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
B 9.5'x8': Glazing-B 9.5'x8', u-value 0.29, SHGC 0.22	152	3,526	0	3,190	3,190
R 9.41'x8': Glazing-R 9.41'x8', u-value 0.29, SHGC 0.22	75.3	1,746	0	1,988	1,988
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	108	2,508	0	2,460	2,460
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	623.4	3,342	0	709	709
Roof R-30: Roof/Ceiling-Roof Deck (roofing, wood, insulation) or SIP Panels Supported on Beams, Custom, Roof With R-30 Entirely Above Deck	1630	4,172	0	1,409	1,409
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	816.8	8,511	0	0	0
Subtotals for structure:		23,805	0	9,756	9,756
People:	5		1,000	1,150	2,150
Equipment:			1,250	2,500	3,750
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 78, Summer CFM: 42		6,707	1,334	891	2,225
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
AED Excursion:		0	0	1,975	1,975
System 19 Unit 3C 101A Load Totals:		30,512	3,584	16,272	19,856

Check Figures

Supply CFM:	759	CFM Per Square ft.:	0.466
Square ft. of Room Area:	1,630	Square ft. Per Ton:	985
Volume (ft ³) of Cond. Space:	14,670		

System Loads

Total Heating Required Including Ventilation Air:	30,512 Btuh	30.512 MBH
Total Sensible Gain:	16,272 Btuh	82 %
Total Latent Gain:	3,584 Btuh	18 %
Total Cooling Required Including Ventilation Air:	19,856 Btuh	1.65 Tons (Based On Sensible + Latent)

Notes

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System 20 Unit 3D 109C Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
B 9.5'x8': Glazing-B 9.5'x8', u-value 0.29, SHGC 0.22	152	3,526	0	2,766	2,766
R 9.41'x8': Glazing-R 9.41'x8', u-value 0.29, SHGC 0.22	75.3	1,746	0	752	752
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	90	2,090	0	1,195	1,195
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	672.6	3,605	0	766	766
Roof R-30: Roof/Ceiling-Roof Deck (roofing, wood, insulation) or SIP Panels Supported on Beams, Custom, Roof With R-30 Entirely Above Deck	1633	4,180	0	1,411	1,411
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	800.8	8,346	0	0	0
Subtotals for structure:		23,493	0	6,890	6,890
People:	5		1,000	1,150	2,150
Equipment:			1,250	2,500	3,750
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 78, Summer CFM: 42		6,720	1,336	892	2,228
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
System 20 Unit 3D 109C Load Totals:		30,213	3,586	11,432	15,018

Check Figures

Supply CFM:	533	CFM Per Square ft.:	0.327
Square ft. of Room Area:	1,633	Square ft. Per Ton:	1,305
Volume (ft ³) of Cond. Space:	14,697		

System Loads

Total Heating Required Including Ventilation Air:	30,213 Btuh	30.213 MBH
Total Sensible Gain:	11,432 Btuh	76 %
Total Latent Gain:	3,586 Btuh	24 %
Total Cooling Required Including Ventilation Air:	15,018 Btuh	1.25 Tons (Based On Sensible + Latent)

Notes

Rhvac is an ACCA approved Manual J and Manual D computer program. Calculations are performed per ACCA Manual J 8th Edition, Version 2, and ACCA Manual D. All computed results are estimates as building use and weather may vary. Be sure to select a unit that meets both sensible and latent loads according to the manufacturer's performance data at your design conditions.



System 21 Unit 3E 103B Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	108	2,508	0	2,748	2,748
N 7.41'x8': Glazing-N 7.41'x8' Door, u-value 0.29, SHGC 0.22	59.2	1,373	0	1,564	1,564
P-Q 8'x11.41': Glazing-P-Q 8'x11.41' Door, u-value 0.29, SHGC 0.22	91.3	2,118	0	2,411	2,411
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	689.2	3,694	0	785	785
Roof R-30: Roof/Ceiling-Roof Deck (roofing, wood, insulation) or SIP Panels Supported on Beams, Custom, Roof With R-30 Entirely Above Deck	2156	5,519	0	1,864	1,864
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	924.8	9,637	0	0	0
Subtotals for structure:		24,849	0	9,372	9,372
People:	5		1,000	1,150	2,150
Equipment:			1,250	2,500	3,750
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 103, Summer CFM: 55		8,872	1,764	1,178	2,942
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
AED Excursion:		0	0	2,938	2,938
System 21 Unit 3E 103B Load Totals:		33,721	4,014	17,138	21,152

Check Figures

Supply CFM:	800	CFM Per Square ft.:	0.371
Square ft. of Room Area:	2,156	Square ft. Per Ton:	1,223
Volume (ft³) of Cond. Space:	19,404		

System Loads

Total Heating Required Including Ventilation Air:	33,721 Btuh	33.721 MBH
Total Sensible Gain:	17,138 Btuh	81 %
Total Latent Gain:	4,014 Btuh	19 %
Total Cooling Required Including Ventilation Air:	21,152 Btuh	1.76 Tons (Based On Sensible + Latent)

Notes

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System 22 Garage Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
11J: Door-Metal - Fiberglass Core	143.2	5,154	0	2,664	2,664
15B0-10s3-10: Wall-Basement, , R-10 board insulation to 3', no interior finish, 10' floor depth	27893.1	102,087	0	0	0
Steel Framed: Wall-Frame, Custom, Steel Framed	5	30	0	13	13
Slab On Grade R-10: Floor-Slab on grade, Custom, Slab On Grade R-10 Horizontal With Vertical 4'	2810	107,904	0	0	0
Subtotals for structure:		215,175	0	2,677	2,677
People:	0		0	0	0
Equipment:			0	1,000	1,000
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 0, Summer CFM: 0		0	0	0	0
Ventilation: Winter CFM: 16,000, Summer CFM: 16,000		1,028,703	513,460	342,901	856,361
System 22 Garage Load Totals:		1,243,878	513,460	346,578	860,038

Check Figures

Supply CFM:	2,869	CFM Per Square ft.:	0.037
Square ft. of Room Area:	77,221	Square ft. Per Ton:	1,077
Volume (ft³) of Cond. Space:	694,989		

System Loads

Total Heating Required Including Ventilation Air:	1,243,878 Btuh	1,243.878 MBH
Total Sensible Gain:	346,578 Btuh	40 %
Total Latent Gain:	513,460 Btuh	60 %
Total Cooling Required Including Ventilation Air:	860,038 Btuh	71.67 Tons (Based On Sensible + Latent)

Notes

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 Calculations are performed per ACCA Manual J 8th Edition, Version 2, and ACCA Manual D.
 All computed results are estimates as building use and weather may vary.
 Be sure to select a unit that meets both sensible and latent loads according to the manufacturer's performance data at your design conditions.



System 23 Building A Corridor Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	36	836	0	848	848
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	152.8	819	0	174	174
Roof R-30: Roof/Ceiling-Roof Deck (roofing, wood, insulation) or SIP Panels Supported on Beams, Custom, Roof With R-30 Entirely Above Deck	1363	3,489	0	1,178	1,178
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	1291	13,452	0	0	0
Subtotals for structure:		18,596	0	2,200	2,200
People:	0		0	0	0
Equipment:			200	400	600
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 127, Summer CFM: 68		10,921	2,172	1,450	3,622
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
AED Excursion:		0	0	80	80
System 23 Building A Corridor Load Totals:		29,517	2,372	4,130	6,502

Check Figures

Supply CFM:	394	CFM Per Square ft.:	0.148
Square ft. of Room Area:	2,654	Square ft. Per Ton:	4,898
Volume (ft ³) of Cond. Space:	23,886		

System Loads

Total Heating Required Including Ventilation Air:	29,517 Btuh	29.517 MBH
Total Sensible Gain:	4,130 Btuh	64 %
Total Latent Gain:	2,372 Btuh	36 %
Total Cooling Required Including Ventilation Air:	6,502 Btuh	0.54 Tons (Based On Sensible + Latent)

Notes

Rhvac is an ACCA approved Manual J and Manual D computer program. Calculations are performed per ACCA Manual J 8th Edition, Version 2, and ACCA Manual D. All computed results are estimates as building use and weather may vary. Be sure to select a unit that meets both sensible and latent loads according to the manufacturer's performance data at your design conditions.



System 24 Building A Vestibule Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
E1 5.33'x8': Glazing-E1 5.33'x8', u-value 0.29, SHGC 0.22	42.6	989	0	1,004	1,004
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	82.9	444	0	94	94
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	78	813	0	0	0
Subtotals for structure:		2,246	0	1,098	1,098
People:	0		0	0	0
Equipment:			100	200	300
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 4, Summer CFM: 2		321	64	43	107
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
AED Excursion:		0	0	94	94
System 24 Building A Vestibule Load Totals:		2,567	164	1,435	1,599

Check Figures

Supply CFM:	67	CFM Per Square ft.:	0.859
Square ft. of Room Area:	78	Square ft. Per Ton:	585
Volume (ft³) of Cond. Space:	702		

System Loads

Total Heating Required Including Ventilation Air:	2,567 Btuh	2.567 MBH
Total Sensible Gain:	1,435 Btuh	90 %
Total Latent Gain:	164 Btuh	10 %
Total Cooling Required Including Ventilation Air:	1,599 Btuh	0.13 Tons (Based On Sensible + Latent)

Notes

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System 25 Building A North Stair Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
S2 3.33'x8': Glazing-E1 5.33'x8', u-value 0.29, SHGC 0.22	26.6	618	0	512	512
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	18	418	0	346	346
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	131.4	704	0	150	150
Roof R-30: Roof/Ceiling-Roof Deck (roofing, wood, insulation) or SIP Panels Supported on Beams, Custom, Roof With R-30 Entirely Above Deck	227	581	0	196	196
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	227	2,365	0	0	0
Subtotals for structure:		4,686	0	1,204	1,204
People:	0		0	0	0
Equipment:			200	400	600
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 22, Summer CFM: 12		1,868	372	248	620
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
AED Excursion:		0	0	286	286
System 25 Building A North Stair Load Totals:		6,554	572	2,138	2,710

Check Figures

Supply CFM:	100	CFM Per Square ft.:	0.220
Square ft. of Room Area:	454	Square ft. Per Ton:	2,010
Volume (ft ³) of Cond. Space:	4,086		

System Loads

Total Heating Required Including Ventilation Air:	6,554 Btuh	6.554 MBH
Total Sensible Gain:	2,138 Btuh	79 %
Total Latent Gain:	572 Btuh	21 %
Total Cooling Required Including Ventilation Air:	2,710 Btuh	0.23 Tons (Based On Sensible + Latent)

Notes

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System 26 Building A South Stair Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
S2 3.33'x8': Glazing-E1 5.33'x8', u-value 0.29, SHGC 0.22	26.6	618	0	704	704
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	18	418	0	475	475
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	131.4	704	0	150	150
Roof R-30: Roof/Ceiling-Roof Deck (roofing, wood, insulation) or SIP Panels Supported on Beams, Custom, Roof With R-30 Entirely Above Deck	227	581	0	196	196
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	227	2,365	0	0	0
Subtotals for structure:		4,686	0	1,525	1,525
People:	0		0	0	0
Equipment:			200	400	600
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 22, Summer CFM: 12		1,868	372	248	620
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
AED Excursion:		0	0	532	532
System 26 Building A South Stair Load Totals:		6,554	572	2,705	3,277

Check Figures

Supply CFM:	126	CFM Per Square ft.:	0.278
Square ft. of Room Area:	454	Square ft. Per Ton:	1,663
Volume (ft ³) of Cond. Space:	4,086		

System Loads

Total Heating Required Including Ventilation Air:	6,554 Btuh	6.554 MBH
Total Sensible Gain:	2,705 Btuh	83 %
Total Latent Gain:	572 Btuh	17 %
Total Cooling Required Including Ventilation Air:	3,277 Btuh	0.27 Tons (Based On Sensible + Latent)

Notes

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System 27 Building B&C Corridor 1st Floor Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	36	836	0	360	360
J 3'x7': Glazing-J 3'x7', u-value 0.29, SHGC 0.22	42	974	0	1,110	1,110
D 6.25"x6": Glazing-D 6.25"x6", u-value 0.29, SHGC 0.22	75	1,740	0	1,980	1,980
B150 6.25"x8": Glazing-150B 6.25"x8", u-value 0.29, SHGC 0.22	50	1,160	0	1,321	1,321
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	561.4	3,009	0	639	639
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	3096	32,260	0	0	0
Subtotals for structure:		39,979	0	5,410	5,410
People:	0		0	0	0
Equipment:			100	200	300
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 149, Summer CFM: 79		12,739	2,534	1,692	4,226
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
System 27 Building B&C Corridor 1st Floor Load Totals:		52,718	2,634	7,302	9,936

Check Figures

Supply CFM:	703	CFM Per Square ft.:	0.227
Square ft. of Room Area:	3,096	Square ft. Per Ton:	3,739
Volume (ft ³) of Cond. Space:	27,864		

System Loads

Total Heating Required Including Ventilation Air:	52,718 Btuh	52.718 MBH
Total Sensible Gain:	7,302 Btuh	73 %
Total Latent Gain:	2,634 Btuh	27 %
Total Cooling Required Including Ventilation Air:	9,936 Btuh	0.83 Tons (Based On Sensible + Latent)

Notes

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System 28 Building B&C Corridor 2nd Floor Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	36	836	0	360	360
C 6.25"x8": Glazing-C 6.25"x8", u-value 0.29, SHGC 0.22	250	5,800	0	6,605	6,605
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	471.1	2,525	0	537	537
Roof R-30: Roof/Ceiling-Roof Deck (roofing, wood, insulation) or SIP Panels Supported on Beams, Custom, Roof With R-30 Entirely Above Deck	1551	3,971	0	1,340	1,340
Subtotals for structure:		13,132	0	8,842	8,842
People:	0		0	0	0
Equipment:			100	200	300
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 149, Summer CFM: 79		12,731	2,532	1,691	4,223
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
System 28 Building B&C Corridor 2nd Floor Load Totals:		25,863	2,632	10,733	13,365

Check Figures

Supply CFM:	501	CFM Per Square ft.:	0.162
Square ft. of Room Area:	3,094	Square ft. Per Ton:	2,778
Volume (ft³) of Cond. Space:	27,846		

System Loads

Total Heating Required Including Ventilation Air:	25,863 Btuh	25.863 MBH
Total Sensible Gain:	10,733 Btuh	80 %
Total Latent Gain:	2,632 Btuh	20 %
Total Cooling Required Including Ventilation Air:	13,365 Btuh	1.11 Tons (Based On Sensible + Latent)

Notes

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 Calculations are performed per ACCA Manual J 8th Edition, Version 2, and ACCA Manual D.
 All computed results are estimates as building use and weather may vary.
 Be sure to select a unit that meets both sensible and latent loads according to the manufacturer's performance data at your design conditions.



System 29 Building C Corridor 3rd Floor Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	72	1,672	0	720	720
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	205.8	1,103	0	234	234
Roof R-30: Roof/Ceiling-Roof Deck (roofing, wood, insulation) or SIP Panels Supported on Beams, Custom, Roof With R-30 Entirely Above Deck	1543	3,950	0	1,333	1,333
Subtotals for structure:		6,725	0	2,287	2,287
People:	0		0	0	0
Equipment:			100	200	300
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 74, Summer CFM: 39		6,349	1,263	843	2,106
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
System 29 Building C Corridor 3rd Floor Load Totals:		13,074	1,363	3,330	4,693

Check Figures

Supply CFM:	174	CFM Per Square ft.:	0.113
Square ft. of Room Area:	1,543	Square ft. Per Ton:	3,945
Volume (ft³) of Cond. Space:	13,887		

System Loads

Total Heating Required Including Ventilation Air:	13,074 Btuh	13.074 MBH
Total Sensible Gain:	3,330 Btuh	71 %
Total Latent Gain:	1,363 Btuh	29 %
Total Cooling Required Including Ventilation Air:	4,693 Btuh	0.39 Tons (Based On Sensible + Latent)

Notes

Rhvac is an ACCA approved Manual J and Manual D computer program.
 Calculations are performed per ACCA Manual J 8th Edition, Version 2, and ACCA Manual D.
 All computed results are estimates as building use and weather may vary.
 Be sure to select a unit that meets both sensible and latent loads according to the manufacturer's performance data at your design conditions.



System 30 Building B Vestibule Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
E2 6.58'x8': Glazing-E2 6.58'x8', u-value 0.29, SHGC 0.22	52.6	1,221	0	1,390	1,390
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	51.9	278	0	59	59
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	66	688	0	0	0
Subtotals for structure:		2,187	0	1,449	1,449
People:	0		0	0	0
Equipment:			100	200	300
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 3, Summer CFM: 2		272	54	36	90
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
AED Excursion:		0	0	628	628
System 30 Building B Vestibule Load Totals:		2,459	154	2,313	2,467

Check Figures

Supply CFM:	108	CFM Per Square ft.:	1.635
Square ft. of Room Area:	66	Square ft. Per Ton:	321
Volume (ft³) of Cond. Space:	594		

System Loads

Total Heating Required Including Ventilation Air:	2,459 Btuh	2.459 MBH
Total Sensible Gain:	2,313 Btuh	94 %
Total Latent Gain:	154 Btuh	6 %
Total Cooling Required Including Ventilation Air:	2,467 Btuh	0.21 Tons (Based On Sensible + Latent)

Notes

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 Calculations are performed per ACCA Manual J 8th Edition, Version 2, and ACCA Manual D.
 All computed results are estimates as building use and weather may vary.
 Be sure to select a unit that meets both sensible and latent loads according to the manufacturer's performance data at your design conditions.



System 31 Building B North Stair Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
S2 3.33'x8': Glazing-E1 5.33'x8', u-value 0.29, SHGC 0.22	26.6	618	0	627	627
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	18	418	0	424	424
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	136.9	733	0	156	156
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	453	4,720	0	0	0
Subtotals for structure:		6,489	0	1,207	1,207
People:	0		0	0	0
Equipment:			200	400	600
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 22, Summer CFM: 12		1,864	371	248	619
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
AED Excursion:		0	0	368	368
System 31 Building B North Stair Load Totals:		8,353	571	2,223	2,794

Check Figures

Supply CFM:	111	CFM Per Square ft.:	0.246
Square ft. of Room Area:	453	Square ft. Per Ton:	1,946
Volume (ft ³) of Cond. Space:	4,077		

System Loads

Total Heating Required Including Ventilation Air:	8,353 Btuh	8.353 MBH
Total Sensible Gain:	2,223 Btuh	80 %
Total Latent Gain:	571 Btuh	20 %
Total Cooling Required Including Ventilation Air:	2,794 Btuh	0.23 Tons (Based On Sensible + Latent)

Notes

Rhvac is an ACCA approved Manual J and Manual D computer program.
 Calculations are performed per ACCA Manual J 8th Edition, Version 2, and ACCA Manual D.
 All computed results are estimates as building use and weather may vary.
 Be sure to select a unit that meets both sensible and latent loads according to the manufacturer's performance data at your design conditions.



System 32 Building C East Stair Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	36	836	0	360	360
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	228	1,222	0	260	260
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	458	4,773	0	0	0
Subtotals for structure:		6,831	0	620	620
People:	0		0	0	0
Equipment:			300	600	900
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 22, Summer CFM: 12		1,884	375	249	624
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
System 32 Building C East Stair Load Totals:		8,715	675	1,469	2,144

Check Figures

Supply CFM:	116	CFM Per Square ft.:	0.254
Square ft. of Room Area:	458	Square ft. Per Ton:	2,563
Volume (ft ³) of Cond. Space:	4,122		

System Loads

Total Heating Required Including Ventilation Air:	8,715 Btuh	8.715 MBH
Total Sensible Gain:	1,469 Btuh	69 %
Total Latent Gain:	675 Btuh	31 %
Total Cooling Required Including Ventilation Air:	2,144 Btuh	0.18 Tons (Based On Sensible + Latent)

Notes

Rhvac is an ACCA approved Manual J and Manual D computer program.
 Calculations are performed per ACCA Manual J 8th Edition, Version 2, and ACCA Manual D.
 All computed results are estimates as building use and weather may vary.
 Be sure to select a unit that meets both sensible and latent loads according to the manufacturer's performance data at your design conditions.



System 33 Building C West Stair Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
S2 3.33'x8': Glazing-S2 5.33'x8', u-value 0.29, SHGC 0.22	26.6	618	0	266	266
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	54	1,254	0	540	540
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	183.4	983	0	209	209
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	678	7,065	0	0	0
Subtotals for structure:		9,920	0	1,015	1,015
People:	0		0	0	0
Equipment:			300	600	900
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 33, Summer CFM: 17		2,790	555	372	927
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
System 33 Building C West Stair Load Totals:		12,710	855	1,987	2,842

Check Figures

Supply CFM:	169	CFM Per Square ft.:	0.250
Square ft. of Room Area:	678	Square ft. Per Ton:	2,863
Volume (ft³) of Cond. Space:	6,102		

System Loads

Total Heating Required Including Ventilation Air:	12,710 Btuh	12.710 MBH
Total Sensible Gain:	1,987 Btuh	70 %
Total Latent Gain:	855 Btuh	30 %
Total Cooling Required Including Ventilation Air:	2,842 Btuh	0.24 Tons (Based On Sensible + Latent)

Notes

Rhvac is an ACCA approved Manual J and Manual D computer program.
 Calculations are performed per ACCA Manual J 8th Edition, Version 2, and ACCA Manual D.
 All computed results are estimates as building use and weather may vary.
 Be sure to select a unit that meets both sensible and latent loads according to the manufacturer's performance data at your design conditions.



System 34 Building D Vestibule Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
E2 6.58'x8': Glazing-E2 6.58'x8', u-value 0.29, SHGC 0.22	52.6	1,221	0	1,011	1,011
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	72.9	391	0	83	83
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	78	813	0	0	0
Subtotals for structure:		2,425	0	1,094	1,094
People:	0		0	0	0
Equipment:			100	200	300
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 4, Summer CFM: 2		321	64	43	107
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
System 34 Building D Vestibule Load Totals:		2,746	164	1,337	1,501

Check Figures

Supply CFM:	62	CFM Per Square ft.:	0.800
Square ft. of Room Area:	78	Square ft. Per Ton:	624
Volume (ft³) of Cond. Space:	702		

System Loads

Total Heating Required Including Ventilation Air:	2,746 Btuh	2.746 MBH
Total Sensible Gain:	1,337 Btuh	89 %
Total Latent Gain:	164 Btuh	11 %
Total Cooling Required Including Ventilation Air:	1,501 Btuh	0.13 Tons (Based On Sensible + Latent)

Notes

Rhvac is an ACCA approved Manual J and Manual D computer program. Calculations are performed per ACCA Manual J 8th Edition, Version 2, and ACCA Manual D. All computed results are estimates as building use and weather may vary. Be sure to select a unit that meets both sensible and latent loads according to the manufacturer's performance data at your design conditions.



System 35 Building D 1st Floor Corridor Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	54	1,254	0	1,038	1,038
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	189.8	1,018	0	216	216
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	4008	41,764	0	0	0
Subtotals for structure:		44,036	0	1,254	1,254
People:	0		0	0	0
Equipment:			300	600	900
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 192, Summer CFM: 102		16,493	3,280	2,190	5,470
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
System 35 Building D 1st Floor Corridor Load Totals:		60,529	3,580	4,044	7,624

Check Figures

Supply CFM:	807	CFM Per Square ft.:	0.201
Square ft. of Room Area:	4,008	Square ft. Per Ton:	6,309
Volume (ft³) of Cond. Space:	36,072		

System Loads

Total Heating Required Including Ventilation Air:	60,529 Btuh	60.529 MBH
Total Sensible Gain:	4,044 Btuh	53 %
Total Latent Gain:	3,580 Btuh	47 %
Total Cooling Required Including Ventilation Air:	7,624 Btuh	0.64 Tons (Based On Sensible + Latent)

Notes

Rhvac is an ACCA approved Manual J and Manual D computer program.
 Calculations are performed per ACCA Manual J 8th Edition, Version 2, and ACCA Manual D.
 All computed results are estimates as building use and weather may vary.
 Be sure to select a unit that meets both sensible and latent loads according to the manufacturer's performance data at your design conditions.



System 38 Building D North Stair Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
S2 3.33'x8': Glazing-E1 5.33'x8', u-value 0.29, SHGC 0.22	26.6	618	0	704	704
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	36	836	0	950	950
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	201.4	1,079	0	230	230
Roof R-30: Roof/Ceiling-Roof Deck (roofing, wood, insulation) or SIP Panels Supported on Beams, Custom, Roof With R-30 Entirely Above Deck	227	581	0	196	196
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	227	2,365	0	0	0
Subtotals for structure:		5,479	0	2,080	2,080
People:	0		0	0	0
Equipment:			300	600	900
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 33, Summer CFM: 17		2,802	558	372	930
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
AED Excursion:		0	0	746	746
System 38 Building D North Stair Load Totals:		8,281	858	3,798	4,656

Check Figures

Supply CFM:	177	CFM Per Square ft.:	0.260
Square ft. of Room Area:	681	Square ft. Per Ton:	1,755
Volume (ft ³) of Cond. Space:	6,129		

System Loads

Total Heating Required Including Ventilation Air:	8,281 Btuh	8.281 MBH
Total Sensible Gain:	3,798 Btuh	82 %
Total Latent Gain:	858 Btuh	18 %
Total Cooling Required Including Ventilation Air:	4,656 Btuh	0.39 Tons (Based On Sensible + Latent)

Notes

Rhvac is an ACCA approved Manual J and Manual D computer program. Calculations are performed per ACCA Manual J 8th Edition, Version 2, and ACCA Manual D. All computed results are estimates as building use and weather may vary. Be sure to select a unit that meets both sensible and latent loads according to the manufacturer's performance data at your design conditions.



System 39 Building D South Stair Summary Loads

Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
S2 3.33'x8': Glazing-E1 5.33'x8', u-value 0.29, SHGC 0.22	26.6	618	0	512	512
A 3'x6': Glazing-A 3'x6', u-value 0.29, SHGC 0.22	54	1,254	0	1,038	1,038
R-19 2x6: Wall-Frame, Custom, 2x6 R-19	183.4	983	0	209	209
20P-0t: Partition Floor (STD=0, WTD=20)-Over open crawl space or garage, Passive, no insulation, tile or vinyl	227	2,365	0	0	0
Subtotals for structure:		5,220	0	1,759	1,759
People:	0		0	0	0
Equipment:			300	600	900
Lighting:	0			0	0
Ductwork:		0	0	0	0
Infiltration: Winter CFM: 33, Summer CFM: 17		2,802	558	372	930
Ventilation: Winter CFM: 0, Summer CFM: 0		0	0	0	0
System 39 Building D South Stair Load Totals:		8,022	858	2,731	3,589

Check Figures

Supply CFM:	127	CFM Per Square ft.:	0.187
Square ft. of Room Area:	681	Square ft. Per Ton:	2,277
Volume (ft³) of Cond. Space:	6,129		

System Loads

Total Heating Required Including Ventilation Air:	8,022 Btuh	8.022 MBH
Total Sensible Gain:	2,731 Btuh	76 %
Total Latent Gain:	858 Btuh	24 %
Total Cooling Required Including Ventilation Air:	3,589 Btuh	0.30 Tons (Based On Sensible + Latent)

Notes

Rhvac is an ACCA approved Manual J and Manual D computer program.
 Calculations are performed per ACCA Manual J 8th Edition, Version 2, and ACCA Manual D.
 All computed results are estimates as building use and weather may vary.
 Be sure to select a unit that meets both sensible and latent loads according to the manufacturer's performance data at your design conditions.



System 1 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
1	Type 1A Living Room	475	6,505	87	1-0	0	3,900	1,268	182	182
2	Type 1A Bedroom	348	7,506	100	1-0	0	2,063	755	96	96
System 1 total		823	14,011	187			5,962	2,023	278	278

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	0.67	75% / 25%	5,962	2,023	7,985

Equipment Data

	<u>Heating System</u>	<u>Cooling System</u>
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 2 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
3	Type 1B.1 Living Room	528	6,782	90	2-0	0	4,944	1,301	231	231
4	Type 1B.1 Bedroom	366	7,843	105	1-0	0	2,468	781	115	115
System 2 total		894	14,625	195			7,412	2,082	346	346

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	0.79	78% / 22%	7,412	2,082	9,494

Equipment Data

	Heating System	Cooling System
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 3 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
5	Type 1B.2 Living Room	594	7,976	106	2-0	0	4,855	1,408	227	227
6	Type 1B.2 Bedroom	366	7,575	101	1-0	0	2,296	727	107	107
System 3 total		960	15,551	207			7,151	2,135	334	334

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	0.77	77% / 23%	7,151	2,135	9,286

Equipment Data

	Heating System	Cooling System
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 4 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
7	Type 2A Living Room	702	7,292	97	2-0	0	5,284	1,300	247	247
8	Type 2A Master Bedroom	437	9,044	121	1-0	0	2,702	810	126	126
9	Type 2A Second Bedroom	159	4,997	67	1-0	0	2,345	752	109	109
System 4 total		1,298	21,333	284			10,330	2,862	482	482

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	1.10	78% / 22%	10,330	2,862	13,192

Equipment Data

	<u>Heating System</u>	<u>Cooling System</u>
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 5 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
10	Type 2A.1 Living Room	700	6,874	92	2-0	0	5,206	1,253	243	243
11	Type 2A.1 Master Bedroom	437	9,179	122	1-0	0	2,725	836	127	127
12	Type 2A.1 Second Bedroom	160	5,112	68	1-0	0	2,363	772	110	110
System 5 total		1,297	21,165	282			10,293	2,861	480	480

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	1.10	78% / 22%	10,293	2,861	13,154

Equipment Data

	Heating System	Cooling System
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 6 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
13	Type 2A.2 Living Room	704	7,192	96	1-0	0	3,347	1,278	156	156
14	Type 2A.2 Master Bedroom	436	8,924	119	1-0	0	1,847	789	86	86
15	Type 2A.2 Second Bedroom	283	8,100	108	1-0	0	2,010	897	94	94
System 6 total		1,423	24,216	323			7,204	2,964	336	336

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	0.85	71% / 29%	7,204	2,964	10,168

Equipment Data

	<u>Heating System</u>	<u>Cooling System</u>
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 7 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
16	Type 2B Living Room	929	15,160	202	2-0	0	8,272	1,728	386	386
17	Type 2B Master Bedroom	368	7,079	94	1-0	0	2,061	630	96	96
18	Type 2B Second Bedroom	155	4,314	58	1-0	0	1,870	630	87	87
System 7 total		1,452	26,553	354			12,202	2,988	569	569

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	1.27	80% / 20%	12,202	2,988	15,190

Equipment Data

	Heating System	Cooling System
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 8 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
19	Type 2C Living Room	867	8,235	110	2-0	0	5,336	1,375	249	249
20	Type 2C Master Bedroom	366	7,793	104	1-0	0	2,454	771	114	114
21	Type 2C Second Bedroom	122	4,566	61	1-0	0	2,223	763	104	104
System 8 total		1,355	20,594	275			10,013	2,909	467	467

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	1.08	77% / 23%	10,013	2,909	12,922

Equipment Data

	<u>Heating System</u>	<u>Cooling System</u>
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 9 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
22	Type 2D Living Room	980	10,363	138	2-0	0	5,491	1,494	256	256
23	Type 2D Master Bedroom	356	7,289	97	1-0	0	2,014	711	94	94
24	Type 2D Second Bedroom	251	7,659	102	1-0	0	2,476	893	116	116
System 9 total		1,587	25,311	337			9,981	3,098	466	466

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	1.09	76% / 24%	9,981	3,098	13,079

Equipment Data

	Heating System	Cooling System
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 10 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
25	Type 2E Living Room	844	14,590	195	2-0	0	7,996	1,688	373	373
26	Type 2E Master Bedroom	441	8,379	112	1-0	0	2,435	668	114	114
27	Type 2E Second Bedroom	194	5,043	67	1-0	0	1,790	654	84	84
System 10 total		1,479	28,012	373			12,222	3,010	570	570

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	1.27	80% / 20%	12,222	3,010	15,232

Equipment Data

	<u>Heating System</u>	<u>Cooling System</u>
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 11 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
28	Type 2F Living Room	783	7,650	102	2-0	0	5,314	1,290	248	248
29	Type 2F Master Bedroom	387	7,561	101	1-0	0	2,634	663	123	123
30	Type 2F Second Bedroom	154	8,182	109	2-0	0	5,132	840	239	239
31	Type 2F Closet	46	1,443	19	1-0	0	208	95	10	10
32	Type 2F Bathroom	80	1,929	26	1-0	0	251	100	12	12
System 11 total		1,450	26,765	357			13,538	2,988	632	632

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	1.38	82% / 18%	13,538	2,988	16,526

Equipment Data

	<u>Heating System</u>	<u>Cooling System</u>
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 12 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
33	Type 2G Living Room	981	13,031	174	2-0	0	7,716	1,691	360	360
34	Type 2G Master Bedroom	375	7,391	99	1-0	0	2,082	674	97	97
35	Type 2G Second Bedroom	156	4,525	60	1-0	0	2,149	672	100	100
System 12 total		1,512	24,947	333			11,947	3,037	557	557

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	1.25	80% / 20%	11,947	3,037	14,984

Equipment Data

	<u>Heating System</u>	<u>Cooling System</u>
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 13 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
36	Type 2H Living Room	832	10,393	139	2-0	0	7,332	1,527	342	342
37	Type 2H Master Bedroom	376	7,480	100	1-0	0	2,610	689	122	122
38	Type 2H Second Bedroom	153	4,647	62	1-0	0	2,513	697	117	117
System 13 total		1,361	22,520	300			12,455	2,913	581	581

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	1.28	81% / 19%	12,455	2,913	15,368

Equipment Data

	Heating System	Cooling System
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 14 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
39	Type 2J Living Room	817	8,231	110	2-0	0	6,072	1,351	283	283
40	Type 2J Master Bedroom	402	7,745	103	1-0	0	2,744	681	128	128
41	Type 2J Second Bedroom	154	4,513	60	1-0	0	2,177	679	102	102
42	Type 2J Den	108	4,814	64	1-0	0	2,940	750	137	137
System 14 total		1,481	25,303	337			13,934	3,461	650	650

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	1.45	80% / 20%	13,934	3,461	17,395

Equipment Data

	Heating System	Cooling System
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 15 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
43	Type 2K Living Room	846	14,668	196	2-0	0	8,730	1,729	407	407
44	Type 2K Master Bedroom	453	8,183	109	1-0	0	2,251	631	105	105
45	Type 2K Second Bedroom	155	4,315	58	1-0	0	1,989	631	93	93
System 15 total		1,454	27,166	362			12,970	2,991	605	605

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	1.33	81% / 19%	12,970	2,991	15,961

Equipment Data

	Heating System	Cooling System
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 16 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
46	Type 3A.1 Living Room	936	14,510	193	2-0	0	8,144	1,704	380	380
47	Type 3A.1 Master Bedroom	461	8,539	114	1-0	0	2,098	667	98	98
48	Type 3A.1 North Bedroom	156	4,328	58	1-0	0	1,949	639	91	91
49	Type 3A.1 South Bedroom	160	4,415	59	1-0	0	1,958	642	91	91
System 16 total		1,713	31,792	424			14,149	3,652	660	660

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	1.48	79% / 21%	14,149	3,652	17,801

Equipment Data

	<u>Heating System</u>	<u>Cooling System</u>
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 17 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
50	Type 3A.2 Living Room	938	14,146	189	2-0	0	7,609	1,709	355	355
51	Type 3A.2 Master Bedroom	473	8,698	116	1-0	0	2,266	667	106	106
52	Type 3A.2 North Bedroom	160	4,407	59	1-0	0	1,800	641	84	84
53	Type 3A.2 South Bedroom	145	4,188	56	1-0	0	1,784	638	83	83
System 17 total		1,716	31,439	419			13,459	3,655	628	628

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	1.43	79% / 21%	13,459	3,655	17,114

Equipment Data

	<u>Heating System</u>	<u>Cooling System</u>
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 18 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
54	Type 3B Living Room	971	14,460	193	2-0	0	7,402	1,739	345	345
55	Type 3B Master Bedroom	425	8,021	107	1-0	0	2,316	662	108	108
56	Type 3B East Bedroom	189	4,796	64	1-0	0	1,695	643	79	79
57	Type 3B West Bedroom	190	4,935	66	1-0	0	1,718	658	80	80
System 18 total		1,775	32,212	429			13,131	3,702	613	613

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	1.40	78% / 22%	13,131	3,702	16,833

Equipment Data

	<u>Heating System</u>	<u>Cooling System</u>
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 19 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
58	Type 3C Living Room	893	14,012	187	2-0	0	9,442	1,670	441	441
59	Type 3C Master Bedroom	395	7,402	99	1-0	0	2,120	634	99	99
60	Type 3C North Bedroom	177	4,627	62	1-0	0	2,360	640	110	110
61	Type 3C South Bedroom	165	4,471	60	1-0	0	2,349	640	110	110
System 19 total		1,630	30,512	407			16,272	3,584	759	759

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	1.65	82% / 18%	16,272	3,584	19,856

Equipment Data

	<u>Heating System</u>	<u>Cooling System</u>
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 20 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
62	Type 3D Living Room	912	14,470	193	2-0	0	6,725	1,706	314	314
63	Type 3D Master Bedroom	399	7,115	95	1-0	0	1,801	629	84	84
64	Type 3D West Bedroom	161	4,258	57	1-0	0	1,444	619	67	67
65	Type 3D East Bedroom	161	4,370	58	1-0	0	1,462	632	68	68
System 20 total		1,633	30,213	403			11,432	3,586	533	533

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	1.25	76% / 24%	11,432	3,586	15,018

Equipment Data

	<u>Heating System</u>	<u>Cooling System</u>
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 21 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
66	Type 3E Living Room	1,311	12,296	164	2-0	0	7,283	1,711	340	340
67	Type 3E Master Bedroom	434	9,919	132	1-0	0	4,637	786	216	216
68	Type 3E North Bedroom	231	5,747	77	1-0	0	2,508	716	117	117
69	Type 3E South Bedroom	180	5,759	77	1-0	0	2,709	801	126	126
System 21 total		2,156	33,721	450			17,138	4,014	800	800

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	1.76	81% / 19%	17,138	4,014	21,152

Equipment Data

	<u>Heating System</u>	<u>Cooling System</u>
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 22 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
70	Garage	77,221	215,175	2,869	13-0	0	3,677	0	172	2,869
	Ventilation		1,028,703				342,901	513,460		
	System 22 total	77,221	1,243,878	2,869			346,578	513,460	172	2,869

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	71.67	40% / 60%	346,578	513,460	860,038

Equipment Data

	Heating System	Cooling System
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 23 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
71	Building A 1st Floor Corridor	1,291	13,452	179	1-0	0	204	100	10	179
72	Building A 2nd Floor Corridor	1,363	16,065	214	1-0	0	3,926	2,272	183	214
System 23 total		2,654	29,517	394			4,130	2,372	193	394

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	0.54	64% / 36%	4,130	2,372	6,502

Equipment Data

	Heating System	Cooling System
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 24 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
73	Building A Vestibule	78	2,567	34	1-0	0	1,435	164	67	67
System 24 total		78	2,567	34			1,435	164	67	67

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	0.13	90% / 10%	1,435	164	1,599

Equipment Data

	<u>Heating System</u>	<u>Cooling System</u>
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 25 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
74	Building A North Stair First Floor	227	4,246	57	1-0	0	1,046	286	49	49
75	Building A North Stair Second Floor	227	2,308	31	1-0	0	1,092	286	51	51
System 25 total		454	6,554	87			2,138	572	100	100

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	0.23	79% / 21%	2,138	572	2,710

Equipment Data

	Heating System	Cooling System
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 26 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
76	Building A South Stair First Floor	227	4,246	57	1-0	0	1,367	286	64	64
77	Building A South Stair Second Floor	227	2,308	31	1-0	0	1,338	286	62	62
System 26 total		454	6,554	87			2,705	572	126	126

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	0.27	83% / 17%	2,705	572	3,277

Equipment Data

	Heating System	Cooling System
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 27 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
78	Building B-C Corridor First Floor	3,096	52,718	703	4-0	0	7,302	2,634	341	703
System 27 total		3,096	52,718	703			7,302	2,634	341	703

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	0.83	73% / 27%	7,302	2,634	9,936

Equipment Data

	Heating System	Cooling System
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 28 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
79	Building B-C Corridor Second Floor	3,094	25,863	345	3-0	0	10,733	2,632	501	501
System 28 total		3,094	25,863	345			10,733	2,632	501	501

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	1.11	80% / 20%	10,733	2,632	13,365

Equipment Data

	<u>Heating System</u>	<u>Cooling System</u>
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 29 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
80	Building C Corridor Third Floor	1,543	13,074	174	1-0	0	3,330	1,363	155	174
System 29 total		1,543	13,074	174			3,330	1,363	155	174

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	0.39	71% / 29%	3,330	1,363	4,693

Equipment Data

	<u>Heating System</u>	<u>Cooling System</u>
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 30 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
81	Building B Vestibule	66	2,459	33	1-0	0	2,313	154	108	108
System 30 total		66	2,459	33			2,313	154	108	108

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	0.21	94% / 6%	2,313	154	2,467

Equipment Data

	Heating System	Cooling System
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 31 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
82	Building B North Stair First Floor	227	4,301	57	1-0	0	1,235	291	58	57
83	Building B North Stair Second Floor	226	4,052	54	1-0	0	987	280	46	54
System 31 total		453	8,353	111			2,223	571	104	111

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	0.23	80% / 20%	2,223	571	2,794

Equipment Data

	Heating System	Cooling System
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 32 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
84	Building C East Stair First Floor	159	3,078	41	1-0	0	543	225	25	41
85	Building C East Stair Second Floor	159	3,078	41	1-0	0	543	225	25	41
86	Building C East Stair Third Floor	140	2,559	34	1-0	0	383	225	18	34
System 32 total		458	8,715	116			1,469	675	69	116

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	0.18	69% / 31%	1,469	675	2,144

Equipment Data

	<u>Heating System</u>	<u>Cooling System</u>
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 33 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
87	Building C West Stair First Floor	226	4,232	56	1-0	0	660	285	31	56
88	Building C West Stair Second Floor	226	4,078	54	1-0	0	584	285	27	54
89	Building C West Stair Third Floor	226	4,400	59	1-0	0	743	285	35	59
System 33 total		678	12,710	169			1,987	855	93	169

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	0.24	70% / 30%	1,987	855	2,842

Equipment Data

	<u>Heating System</u>	<u>Cooling System</u>
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 34 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
90	Building D Vestibule	78	2,746	37	1-0	0	1,337	164	62	62
System 34 total		78	2,746	37			1,337	164	62	62

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	0.13	89% / 11%	1,337	164	1,501

Equipment Data

	<u>Heating System</u>	<u>Cooling System</u>
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 35 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
91	Building D Corridor First Floor	1,280	13,338	178	1-0	0	200	100	9	178
92	Building D Corridor Second Floor	1,364	23,692	316	2-0	0	2,076	1,728	97	316
93	Building D Corridor ThirdFloor	1,364	23,499	313	2-0	0	1,768	1,752	82	313
System 35 total		4,008	60,529	807			4,044	3,580	189	807

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	0.64	53% / 47%	4,044	3,580	7,624

Equipment Data

	<u>Heating System</u>	<u>Cooling System</u>
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 38 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
94	Building D North Stair First Floor	227	4,246	57	1-0	0	1,366	286	64	64
95	Building D North Stair Second Floor	227	1,727	23	1-0	0	1,094	286	51	51
96	Building D North Stair Third Floor	227	2,308	31	1-0	0	1,338	286	62	62
System 38 total		681	8,281	110			3,798	858	177	177

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	0.39	82% / 18%	3,798	858	4,656

Equipment Data

	<u>Heating System</u>	<u>Cooling System</u>
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh



System 39 Room Load Summary

Room No	Room Name	Area SF	Htg Sens Btuh	Min Htg CFM	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Min Clg CFM	Act Sys CFM
---Zone 1---										
97	Building D South Stair First Floor	227	4,246	57	1-0	0	906	286	42	42
98	Building D South Stair Second Floor	227	1,727	23	1-0	0	750	286	35	35
99	Building D South Stair Third Floor	227	2,049	27	1-0	0	1,075	286	50	50
System 39 total		681	8,022	107			2,731	858	127	127

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	0.30	76% / 24%	2,731	858	3,589

Equipment Data

	<u>Heating System</u>	<u>Cooling System</u>
Type:	Natural Gas Furnace	Standard Air Conditioner
Model:		
Indoor Model:		
Brand:		
Efficiency:	95 AFUE	13 SEER
Sound:	0	0
Capacity:	0 Btuh	0 Btuh
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh