

Project Name: Basement: May 15, 2022

Address: NS

OUTDOOR DESIGN CONDITIONS

Weather station: Shearwater AP

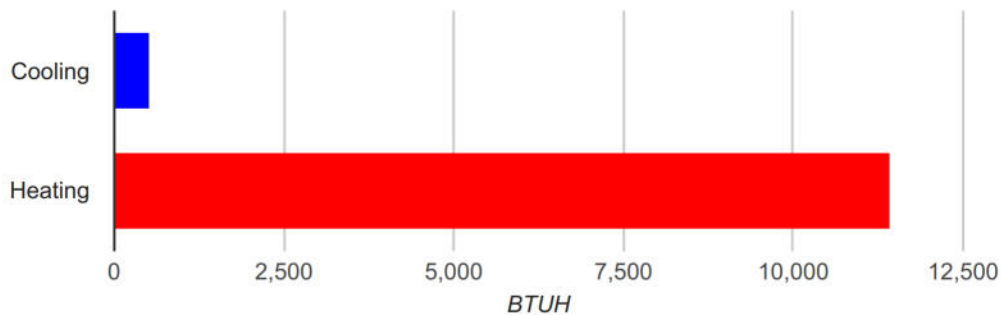
Summer Outdoor F:	76	Summer Indoor F:	73	Design Grains:	12	Daily Range:	Low
Winter Outdoor F:	5	Winter Indoor F:	68	Cooling RH:	50	Elevation (Ft):	167

LOAD CALCULATION TOTALS

HVAC System: Minisplit

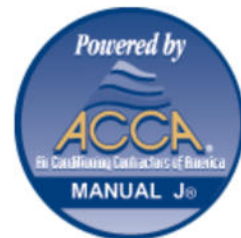
Heated square footage:	536	Heating BTUH:	11,402
Cooled square footage:	0	Cooling BTUH:	501
Heated volume (above grade CF):	2,986	CFM:	5
Cooled volume (above grade CF):	0	Sensible cooling:	144
Exposed wall area (SF):	345	Latent cooling:	357
		SHR:	0.288

Load Calculation



Approved ACCA MJ8 Calculations

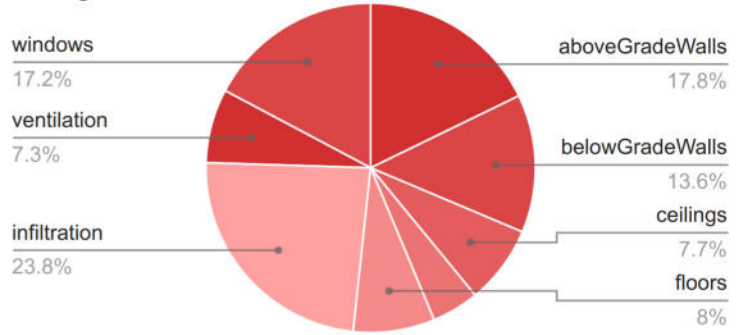
Calculations are based on the ACCA Manual J 8th Edition and are approved by ACCA. All computed calculations are estimates on building use, weather data, and inputted values such as R-Values, window types, duct loss, etc. Equipment selections should meet both the latent and sensible gain as well as building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



HEATING AND COOLING LOADS

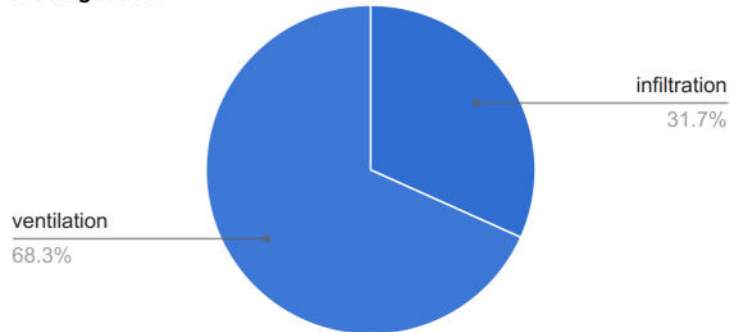
HEATING LOADS		
SECTION	AREA	HEAT LOSS
aboveGradeWalls	372	2,029
belowGradeWalls	450	1,546
blowerMotor	0	0
ceilings	536	878
doors	24	529
floors	536	912
infiltration	0	2,715
skylights	0	0
ventilation	0	827
windows	24	1,966
Totals		11,402

Heating Loads

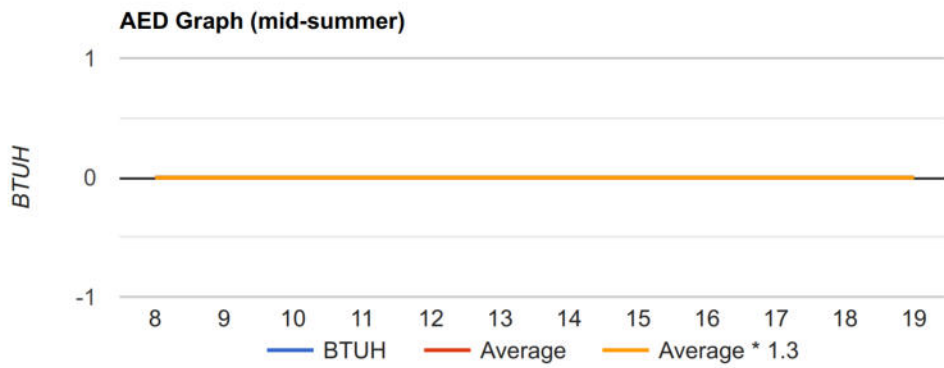


COOLING LOADS			
SECTION	AREA	SENSIBLE	LATENT
AEDExcursion	0	0	0
aboveGradeWalls	372	0	0
belowGradeWalls	450	0	0
blowerMotor	0	0	0
ceilings	536	0	0
doors	24	0	0
floors	536	0	0
infiltration	0	46	113
skylights	0	0	0
ventilation	0	98	244
windows	24	0	0
Totals		144	357

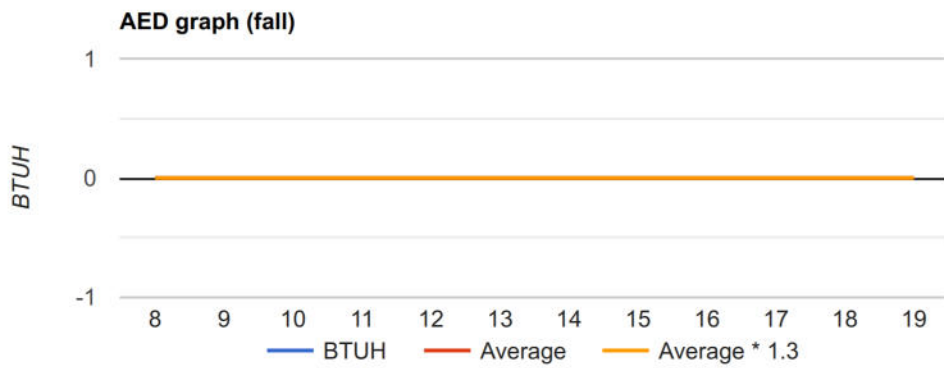
Cooling Loads



FENESTRATION LOADS



This graph represents hourly aggregate fenestration loads in mid-summer.



This graph represents hourly aggregate fenestration loads in October.

COMPONENT LOADS

ABOVE GRADE WALLS						
System generated wall - E 8 inch brick, stone or concrete, Wood framing, R-15 cavity insulation, None board insulation.	Construction nr: U Value:	15B15-0w-x 0.088	Exposure: Area:	E 12.5	Heating BTUH: Cooling BTUH:	69 0
System generated wall - N 8 inch brick, stone or concrete, Wood framing, R-15 cavity insulation, None board insulation.	Construction nr: U Value:	15B15-0w-x 0.088	Exposure: Area:	N 27.5	Heating BTUH: Cooling BTUH:	140 0
System generated wall - S 8 inch brick, stone or concrete, Wood framing, R-15 cavity insulation, None board insulation.	Construction nr: U Value:	15B15-0w-x 0.088	Exposure: Area:	S 54	Heating BTUH: Cooling BTUH:	299 0
System generated wall - W 8 inch brick, stone or concrete, Wood framing, R-15 cavity insulation, None board insulation.	Construction nr: U Value:	15B15-0w-x 0.088	Exposure: Area:	W 40	Heating BTUH: Cooling BTUH:	222 0
System generated wall - E 8 inch brick, stone or concrete, Wood framing, R-15 cavity insulation, None board insulation.	Construction nr: U Value:	15B15-0w-x 0.088	Exposure: Area:	E 78	Heating BTUH: Cooling BTUH:	432 0
System generated wall - S 8 inch brick, stone or concrete, Wood framing, R-15 cavity insulation, None board insulation.	Construction nr: U Value:	15B15-0w-x 0.088	Exposure: Area:	S 112	Heating BTUH: Cooling BTUH:	621 0
System generated wall - W 8 inch brick, stone or concrete, Wood framing, R-15 cavity insulation, None board insulation.	Construction nr: U Value:	15B15-0w-x 0.088	Exposure: Area:	W 48	Heating BTUH: Cooling BTUH:	245 0

BELOW GRADE WALLS						
System generated wall - N 8 inch brick, stone or concrete, Wood framing, R-15 cavity insulation, None board insulation.	Construction nr: U Value:	15B15-0w-x 0.051	Area:	66	Heating:	212
System generated wall - E 8 inch brick, stone or concrete, Wood framing, R-15 cavity insulation, None board insulation.	Construction nr: U Value:	15B15-0w-x 0.051	Area:	27.5	Heating:	88
System generated wall - N 8 inch brick, stone or concrete, Wood framing, R-15 cavity insulation, None board insulation.	Construction nr: U Value:	15B15-0w-x 0.051	Area:	60.5	Heating:	194
System generated wall - S 8 inch brick, stone or concrete, Wood framing, R-15 cavity insulation, None board insulation.	Construction nr: U Value:	15B15-0w-x 0.065	Area:	22	Heating:	90
System generated wall - W 8 inch brick, stone or concrete, Wood framing, R-15 cavity insulation, None board insulation.	Construction nr: U Value:	15B15-0w-x 0.057	Area:	40	Heating:	144
System generated wall - N 8 inch brick, stone or concrete, Wood framing, R-15 cavity insulation, None board insulation.	Construction nr: U Value:	15B15-0w-x 0.051	Area:	49.5	Heating:	159

BELOW GRADE WALLS

System generated wall - E 8 inch brick, stone or concrete, Wood framing, R-15 cavity insulation, None board insulation.	Construction nr: 15B15-0w-x U Value: 0.065	Area: 54	Heating: 221
System generated wall - W 8 inch brick, stone or concrete, Wood framing, R-15 cavity insulation, None board insulation.	Construction nr: 15B15-0w-x U Value: 0.051	Area: 55	Heating: 177
System generated wall - N 8 inch brick, stone or concrete, Wood framing, R-15 cavity insulation, None board insulation.	Construction nr: 15B15-0w-x U Value: 0.051	Area: 27.5	Heating: 88
System generated wall - W 8 inch brick, stone or concrete, Wood framing, R-15 cavity insulation, None board insulation.	Construction nr: 15B15-0w-x U Value: 0.057	Area: 48	Heating: 172

WINDOWS

Bedroom Window Window, NFRC rated, Clear glass.	Construction nr: 1G Area: 12 Exposure: S	U Value: 1.3 SHGC: 0.45	Heating BTUH: 983 Cooling BTUH: 0
Rec Room Window Window, NFRC rated, Clear glass.	Construction nr: 1G Area: 12 Exposure: E	U Value: 1.3 SHGC: 0.45	Heating BTUH: 983 Cooling BTUH: 0

Window cooling BTUHs shown here are daily average values. See AED graphs for details of fenestration loads during the day.

CEILINGS

System generated ceiling. Ceiling under attic or attic knee wall, Asphalt shingles, Dark, R-38.	Construction nr: 16B-38 ad U Value: 0.026	Area: 60	Heating BTUH: 98 Cooling BTUH: 0
System generated ceiling. Ceiling under attic or attic knee wall, Asphalt shingles, Dark, R-38.	Construction nr: 16B-38 ad U Value: 0.026	Area: 110	Heating BTUH: 180 Cooling BTUH: 0
System generated ceiling. Ceiling under attic or attic knee wall, Asphalt shingles, Dark, R-38.	Construction nr: 16B-38 ad U Value: 0.026	Area: 306	Heating BTUH: 501 Cooling BTUH: 0
System generated ceiling. Ceiling under attic or attic knee wall, Asphalt shingles, Dark, R-38.	Construction nr: 16B-38 ad U Value: 0.026	Area: 60	Heating BTUH: 98 Cooling BTUH: 0

SKYLIGHTS

There are no components for this section.

Skylight cooling BTUHs shown here are daily average values. See AED graphs for details of fenestration loads during the day.

DOORS

Default doors for wall id 2644818 Metal Door, Polystyrene Core.	Construction nr: 11 U Value: 0.35	Area: 24 Exposure: S	Heating BTUH: 529 Cooling BTUH: 0
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FLOORS

System generated floor. Basement floor, no floor insulation.	Construction nr: 21A Area: 60	Heating U Value: 0.027 Cooling U Value: 0	Heating BTUH: 102 Cooling BTUH: 0 F Value: N/A
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FLOORS

System generated floor. Basement floor, no floor insulation.	Construction nr: Area:	21A 110	Heating U Value:0.027 Cooling U Value:0	Heating BTUH: Cooling BTUH: F Value:	187 0 N/A
System generated floor. Basement floor, no floor insulation.	Construction nr: Area:	21A 306	Heating U Value:0.027 Cooling U Value:0	Heating BTUH: Cooling BTUH: F Value:	521 0 N/A
System generated floor. Basement floor, no floor insulation.	Construction nr: Area:	21A 60	Heating U Value:0.027 Cooling U Value:0	Heating BTUH: Cooling BTUH: F Value:	102 0 N/A

VENTILATION

HRV	Heating SER: Sensible SER: Latent LER:	0.6 0 N/A	CFM:	30	Heating BTUH: Sensible BTUH:	827 98
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HOT WATER PIPING

There are no components for this section.

DUCTS

There are no components for this section.

INFILTRATION

Leakage Category:	Semi-Tight	NCFM Heating: NCFM Cooling:	39 14	Heating BTUH: Sensible BTUH: Latent BTUH:	2,715 46 113
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BLOWER MOTOR

0 watt blower motor; OEM performance data not adjusted for blower motor heat.	Watts:	0	Sensible BTUH:	0
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WINTER HUMIDIFICATION

There are no components for this section.

OCCUPANTS

There are no components for this section.

APPLIANCES

There are no components for this section.

PLANTS

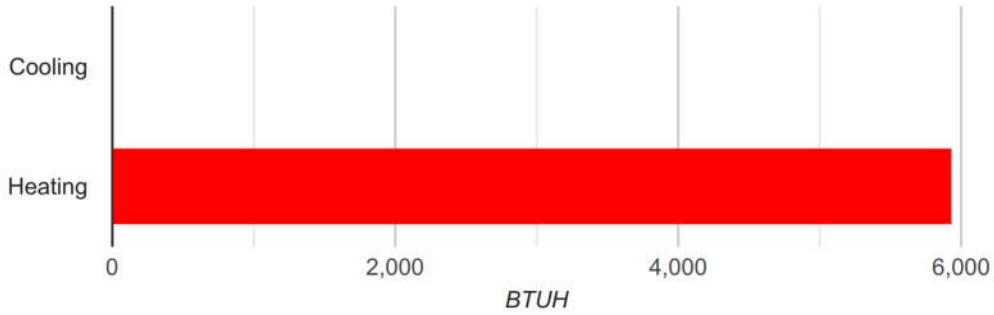
There are no components for this section.

ROOM DETAIL

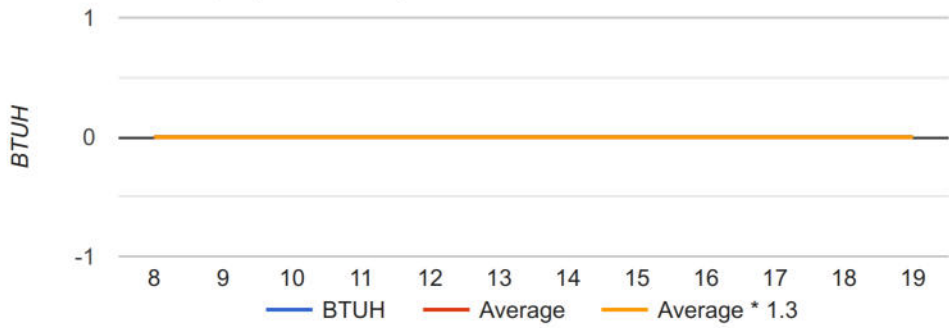
Room name: Rec Room

Heated square footage:	306	Total Cooling BTUH:	0
Cooled square footage:	0	Total Heating BTUH:	5,925
Heated volume (above grade CF):	1,836	CFM:	97
Cooled volume (above grade CF):	0		
Exposed wall area (SF):	226		

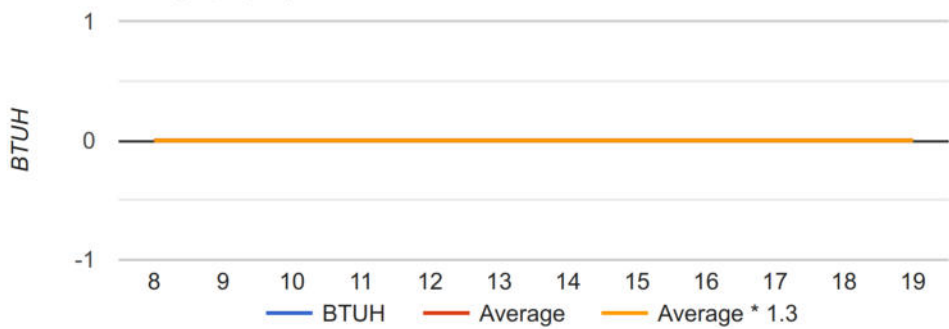
Load Calculation



AED Graph (mid-summer)



AED graph (fall)

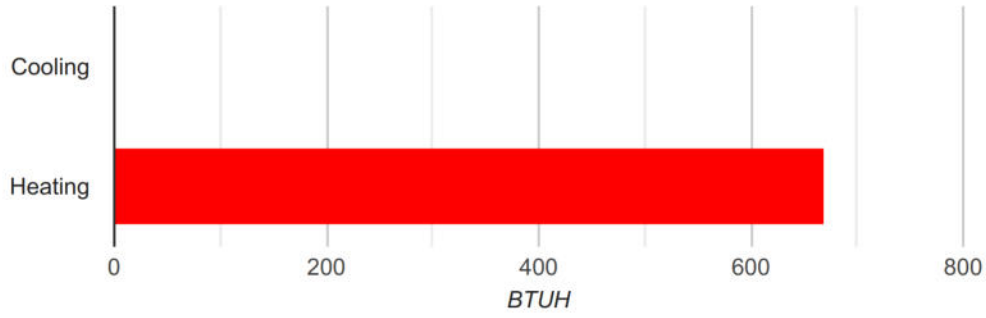


ROOM DETAIL

Room name: Bathroom

Heated square footage:	60	Total Cooling BTUH:	0
Cooled square footage:	0	Total Heating BTUH:	669
Heated volume (above grade CF):	180	CFM:	11
Cooled volume (above grade CF):	0		
Exposed wall area (SF):	13		

Load Calculation

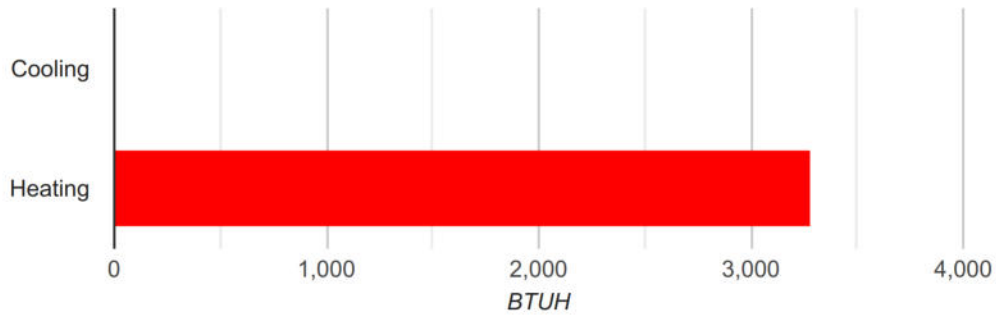


ROOM DETAIL

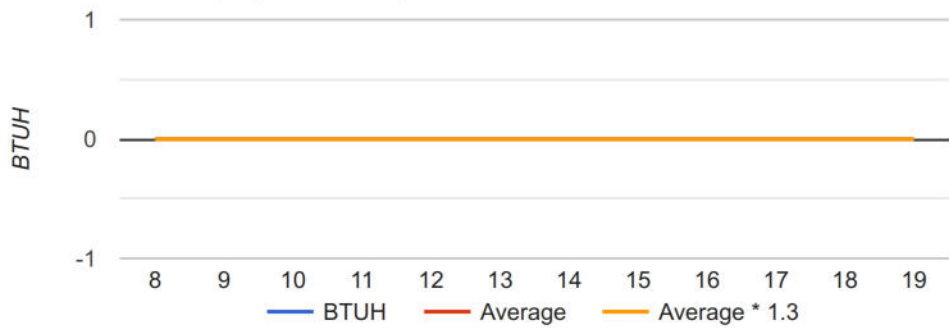
Room name: Bedroom

Heated square footage:	110	Total Cooling BTUH:	0
Cooled square footage:	0	Total Heating BTUH:	3,275
Heated volume (above grade CF):	550	CFM:	54
Cooled volume (above grade CF):	0		
Exposed wall area (SF):	106		

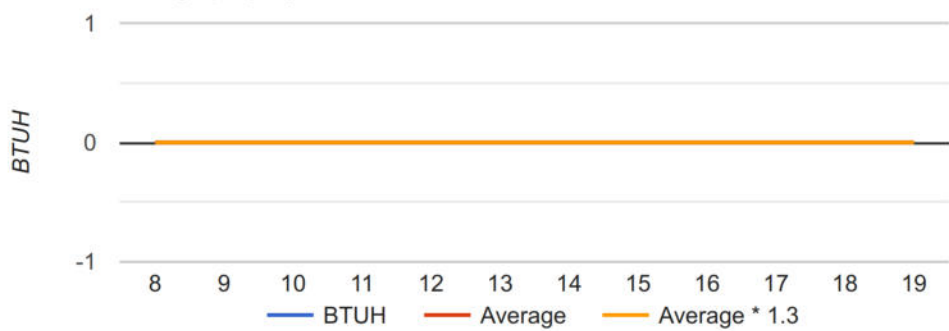
Load Calculation



AED Graph (mid-summer)



AED graph (fall)



ROOM DETAIL

Room name: Stairwell

Heated square footage:	60	Total Cooling BTUH:	0
Cooled square footage:	0	Total Heating BTUH:	706
Heated volume (above grade CF):	420	CFM:	11
Cooled volume (above grade CF):	0		
Exposed wall area (SF):	0		

Load Calculation

