

Project Name: 619B Salazar

Address: 619B Salazar Road, Taos, NM

OUTDOOR DESIGN CONDITIONS

Weather station: Taos Municipal AP AWOS

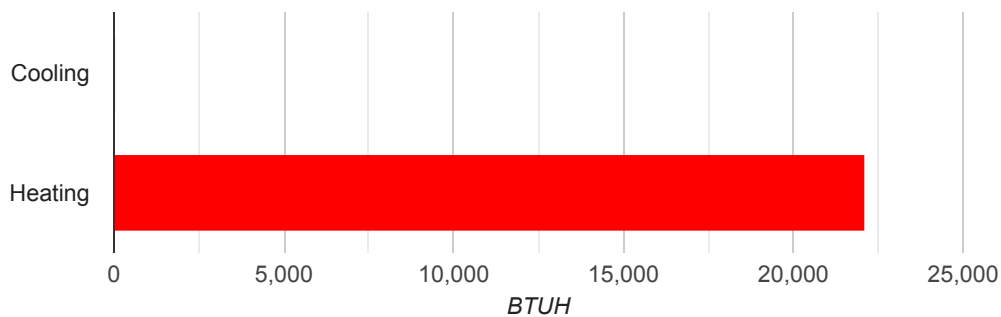
Summer Outdoor F:	86	Summer Indoor F:	75	Design Grains:	-50	Daily Range:	High
Winter Outdoor F:	4	Winter Indoor F:	68	Cooling RH:	45	Elevation (Ft):	7,090

LOAD CALCULATION TOTALS

HVAC System: Combi Boiler

Heated square footage:	1,000	Heating BTUH:	22,061
Cooled square footage:	0	Cooling BTUH:	0
Heated volume (above grade CF):	8,000	CFM:	364
Cooled volume (above grade CF):	0	Sensible cooling:	0
Exposed wall area (SF):	1,040	Latent cooling:	0
		SHR:	

Load Calculation



Approved ACCA MJ8 Calculations

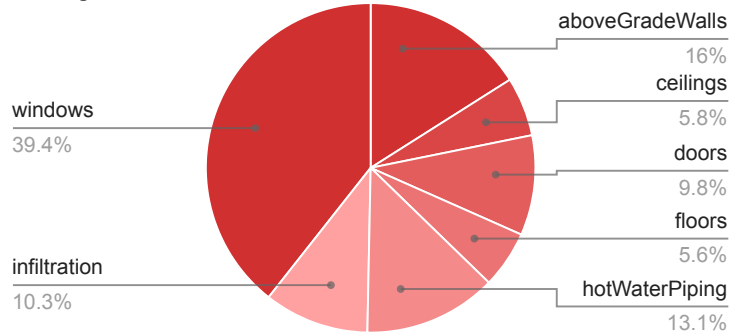
Calculations are based on the ACCA Manual J 8th Edition and are approved by ACCA. All computed calculations are estimates on building use, weather data, and inputted values such as R-Values, window types, duct loss, etc. Equipment selections should meet both the latent and sensible gain as well as building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



HEATING AND COOLING LOADS

HEATING LOADS		
SECTION	AREA	HEAT LOSS
aboveGradeWalls	812	3,534
blowerMotor	0	0
ceilings	1,000	1,280
doors	72	2,166
floors	1,000	1,241
hotWaterPiping	0	2,880
infiltration	0	2,274
skylights	0	0
windows	156	8,686
Totals		22,061

Heating Loads

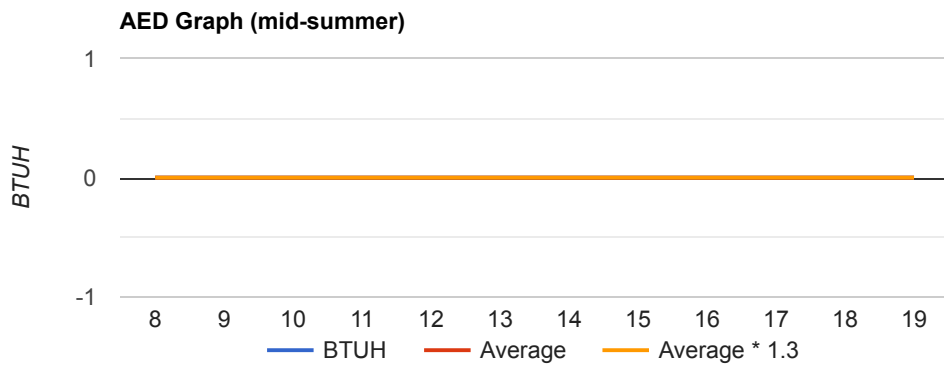


COOLING LOADS			
SECTION	AREA	SENSIBLE	LATENT
AEDExcursion	0	0	0
aboveGradeWalls	812	0	0
appliances	0	0	0
blowerMotor	0	0	0
ceilings	1,000	0	0
doors	72	0	0
floors	1,000	0	0
infiltration	0	0	0
occupants	0	0	0
skylights	0	0	0
windows	156	0	0
Totals		0	0

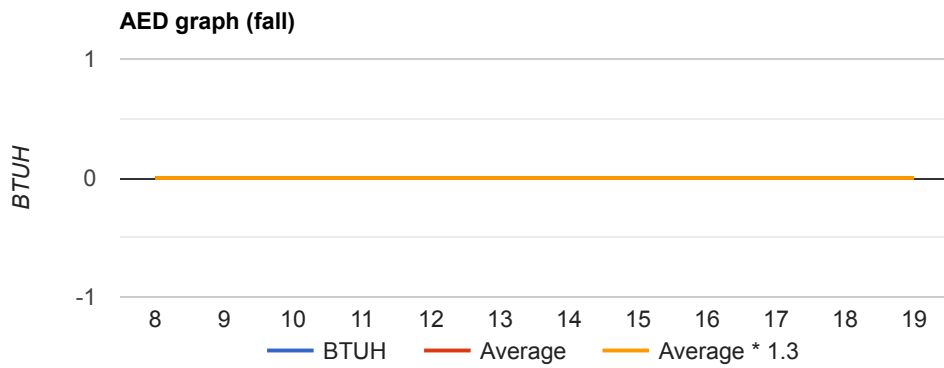
Cooling Loads

No data

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 Frame Wall, Wood framing, R-19 cavity insulation, Stucco or Siding.	Construction nr: U Value:	12E-0s w 0.068	Exposure: Area:	E 152	Heating BTUH: Cooling BTUH:	662 0
System generated wall - S Frame Wall, Wood framing, R-19 cavity insulation, Stucco or Siding.	Construction nr: U Value:	12E-0s w 0.068	Exposure: Area:	S 28	Heating BTUH: Cooling BTUH:	122 0
System generated wall - S Frame Wall, Wood framing, R-19 cavity insulation, Stucco or Siding.	Construction nr: U Value:	12E-0s w 0.068	Exposure: Area:	S 12	Heating BTUH: Cooling BTUH:	52 0
System generated wall - N Frame Wall, Wood framing, R-19 cavity insulation, Stucco or Siding.	Construction nr: U Value:	12E-0s w 0.068	Exposure: Area:	N 82	Heating BTUH: Cooling BTUH:	357 0
System generated wall - E Frame Wall, Wood framing, R-19 cavity insulation, Stucco or Siding.	Construction nr: U Value:	12E-0s w 0.068	Exposure: Area:	E -4	Heating BTUH: Cooling BTUH:	-17 0
System generated wall - W Frame Wall, Wood framing, R-19 cavity insulation, Stucco or Siding.	Construction nr: U Value:	12E-0s w 0.068	Exposure: Area:	W 32	Heating BTUH: Cooling BTUH:	139 0
System generated wall - N Frame Wall, Wood framing, R-19 cavity insulation, Stucco or Siding.	Construction nr: U Value:	12E-0s w 0.068	Exposure: Area:	N 82	Heating BTUH: Cooling BTUH:	357 0
System generated wall - W Frame Wall, Wood framing, R-19 cavity insulation, Stucco or Siding.	Construction nr: U Value:	12E-0s w 0.068	Exposure: Area:	W 96	Heating BTUH: Cooling BTUH:	418 0
System generated wall - S Frame Wall, Wood framing, R-19 cavity insulation, Stucco or Siding.	Construction nr: U Value:	12E-0s w 0.068	Exposure: Area:	S 82	Heating BTUH: Cooling BTUH:	357 0
System generated wall - W Frame Wall, Wood framing, R-19 cavity insulation, Stucco or Siding.	Construction nr: U Value:	12E-0s w 0.068	Exposure: Area:	W 42	Heating BTUH: Cooling BTUH:	183 0
System generated wall - S Frame Wall, Wood framing, R-19 cavity insulation, Stucco or Siding.	Construction nr: U Value:	12E-0s w 0.068	Exposure: Area:	S 74	Heating BTUH: Cooling BTUH:	322 0
System generated wall - N Frame Wall, Wood framing, R-19 cavity insulation, Stucco or Siding.	Construction nr: U Value:	12E-0s w 0.068	Exposure: Area:	N 70	Heating BTUH: Cooling BTUH:	305 0
System generated wall - E Frame Wall, Wood framing, R-19 cavity insulation, Stucco or Siding.	Construction nr: U Value:	12E-0s w 0.068	Exposure: Area:	E 64	Heating BTUH: Cooling BTUH:	279 0

BELOW GRADE WALLS

There are no components for this section.

WINDOWS

Default small windows for wall id 4740502 Window, NFRC rated, Clear glass.	Construction nr: Area: Exposure:	1G 12 S	U Value: SHGC:	0.87 0.67	Heating BTUH: Cooling BTUH:	668 0
Default medium windows for wall id 4740502 Window, NFRC rated, Clear glass.	Construction nr: Area: Exposure:	1G 24 S	U Value: SHGC:	0.87 0.67	Heating BTUH: Cooling BTUH:	1,336 0
Default small windows for wall id 4740543 Window, NFRC rated, Clear glass.	Construction nr: Area: Exposure:	1G 12 S	U Value: SHGC:	0.87 0.67	Heating BTUH: Cooling BTUH:	668 0
Default small windows for wall id 4740328 Window, NFRC rated, Clear glass.	Construction nr: Area: Exposure:	1G 6 N	U Value: SHGC:	0.87 0.67	Heating BTUH: Cooling BTUH:	334 0
Default medium windows for wall id 4740328 Window, NFRC rated, Clear glass.	Construction nr: Area: Exposure:	1G 12 N	U Value: SHGC:	0.87 0.67	Heating BTUH: Cooling BTUH:	668 0
Default large windows for wall id 4740328 Window, NFRC rated, Clear glass.	Construction nr: Area: Exposure:	1G 36 N	U Value: SHGC:	0.87 0.67	Heating BTUH: Cooling BTUH:	2,004 0
Default small windows for wall id 4740329 Window, NFRC rated, Clear glass.	Construction nr: Area: Exposure:	1G 12 E	U Value: SHGC:	0.87 0.67	Heating BTUH: Cooling BTUH:	668 0
Default small windows for wall id 4719114 Window, NFRC rated, Clear glass.	Construction nr: Area: Exposure:	1G 6 N	U Value: SHGC:	0.87 0.67	Heating BTUH: Cooling BTUH:	334 0
Default small windows for wall id 4739930 Window, NFRC rated, Clear glass.	Construction nr: Area: Exposure:	1G 6 S	U Value: SHGC:	0.87 0.67	Heating BTUH: Cooling BTUH:	334 0
Default small windows for wall id 4739929 Window, NFRC rated, Clear glass.	Construction nr: Area: Exposure:	1G 6 W	U Value: SHGC:	0.87 0.67	Heating BTUH: Cooling BTUH:	334 0
Default small windows for wall id 4740309 Window, NFRC rated, Clear glass.	Construction nr: Area: Exposure:	1G 6 S	U Value: SHGC:	0.87 0.67	Heating BTUH: Cooling BTUH:	334 0
Default small windows for wall id 4740444 Window, NFRC rated, Clear glass.	Construction nr: Area: Exposure:	1G 6 N	U Value: SHGC:	0.87 0.67	Heating BTUH: Cooling BTUH:	334 0
Default medium windows for wall id 4740444 Window, NFRC rated, Clear glass.	Construction nr: Area: Exposure:	1G 12 N	U Value: SHGC:	0.87 0.67	Heating BTUH: Cooling BTUH:	668 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, Metal, Light, R-50.	Construction nr: U Value:	16C-50 ml 0.02	Area:	200	Heating BTUH: Cooling BTUH:	256 0
System generated ceiling. Ceiling under attic or attic knee wall, Metal, Light, R-50.	Construction nr: U Value:	16C-50 ml 0.02	Area:	85	Heating BTUH: Cooling BTUH:	109 0
System generated ceiling. Ceiling under attic or attic knee wall, Metal, Light, R-50.	Construction nr: U Value:	16C-50 ml 0.02	Area:	333	Heating BTUH: Cooling BTUH:	426 0
System generated ceiling. Ceiling under attic or attic knee wall, Metal, Light, R-50.	Construction nr: U Value:	16C-50 ml 0.02	Area:	133	Heating BTUH: Cooling BTUH:	170 0
System generated ceiling. Ceiling under attic or attic knee wall, Metal, Light, R-50.	Construction nr: U Value:	16C-50 ml 0.02	Area:	66	Heating BTUH: Cooling BTUH:	84 0

CEILINGS

System generated ceiling. Ceiling under attic or attic knee wall, Metal, Light, R-50.	Construction nr: 16C-50 ml U Value: 0.02	Area: 83	Heating BTUH: 106 Cooling BTUH: 0
System generated ceiling. Ceiling under attic or attic knee wall, Metal, Light, R-50.	Construction nr: 16C-50 ml U Value: 0.02	Area: 100	Heating BTUH: 128 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 4740502 Wood Door, Hollow Core.	Construction nr: 11 U Value: 0.47	Area: 24 Exposure: S	Heating BTUH: 722 Cooling BTUH: 0
Default doors for wall id 4740543 Wood Door, Hollow Core.	Construction nr: 11 U Value: 0.47	Area: 24 Exposure: S	Heating BTUH: 722 Cooling BTUH: 0
Default doors for wall id 4740329 Wood Door, Hollow Core.	Construction nr: 11 U Value: 0.47	Area: 24 Exposure: E	Heating BTUH: 722 Cooling BTUH: 0

FLOORS

System generated floor. Floor over enclosed unconditioned crawl space or basement, R-11 or R-15 blanket.	Construction nr: 19C-11sp Area: 200	Heating U Value:0.073 Cooling U Value:0.073	Heating BTUH: 248 Cooling BTUH: 0 F Value: N/A
System generated floor. Floor over enclosed unconditioned crawl space or basement, R-11 or R-15 blanket.	Construction nr: 19C-11sp Area: 85	Heating U Value:0.073 Cooling U Value:0.073	Heating BTUH: 105 Cooling BTUH: 0 F Value: N/A
System generated floor. Floor over enclosed unconditioned crawl space or basement, R-11 or R-15 blanket.	Construction nr: 19C-11sp Area: 333	Heating U Value:0.073 Cooling U Value:0.073	Heating BTUH: 413 Cooling BTUH: 0 F Value: N/A
System generated floor. Floor over enclosed unconditioned crawl space or basement, R-11 or R-15 blanket.	Construction nr: 19C-11sp Area: 133	Heating U Value:0.073 Cooling U Value:0.073	Heating BTUH: 165 Cooling BTUH: 0 F Value: N/A
System generated floor. Floor over enclosed unconditioned crawl space or basement, R-11 or R-15 blanket.	Construction nr: 19C-11sp Area: 66	Heating U Value:0.073 Cooling U Value:0.073	Heating BTUH: 82 Cooling BTUH: 0 F Value: N/A
System generated floor. Floor over enclosed unconditioned crawl space or basement, R-11 or R-15 blanket.	Construction nr: 19C-11sp Area: 83	Heating U Value:0.073 Cooling U Value:0.073	Heating BTUH: 103 Cooling BTUH: 0 F Value: N/A
System generated floor. Floor over enclosed unconditioned crawl space or basement, R-11 or R-15 blanket.	Construction nr: 19C-11sp Area: 100	Heating U Value:0.073 Cooling U Value:0.073	Heating BTUH: 124 Cooling BTUH: 0 F Value: N/A

VENTILATION

There are no components for this section.

HOT WATER PIPING

HOT WATER PIPING

1 inch Copper; 1 1/2 inches insulation or better	F-Value: 0.17	Length: 110	Heating BTUH: 2,880
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DUCTS

There are no components for this section.

INFILTRATION

Leakage Category: Semi-Tight	NCFM Heating: 41	Heating BTUH: 2,274
	NCFM Cooling: 21	Sensible BTUH: 0
		Latent BTUH: 0

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

Nr. Occupants: 2	Sensible BTUH: 0	Latent BTUH: 0
Nr. Occupants: 1	Sensible BTUH: 0	Latent BTUH: 0
Nr. Occupants: 1	Sensible BTUH: 0	Latent BTUH: 0

APPLIANCES

Refrigerator or Freezer - 16CuFt	Quantity: 1	Sensible BTUH: 0	Latent BTUH: 0
Range with hood and exhaust to outdoors	Quantity: 1	Sensible BTUH: 0	Latent BTUH: 0
Dishwasher	Quantity: 1	Sensible BTUH: 0	Latent BTUH: 0
Refrigerator or Freezer - 16CuFt	Quantity: 1	Sensible BTUH: 0	Latent BTUH: 0
Clothes washing machine	Quantity: 1	Sensible BTUH: 0	Latent BTUH: 0
Vented clothes dryer	Quantity: 1	Sensible BTUH: 0	Latent BTUH: 0

PLANTS

There are no components for this section.

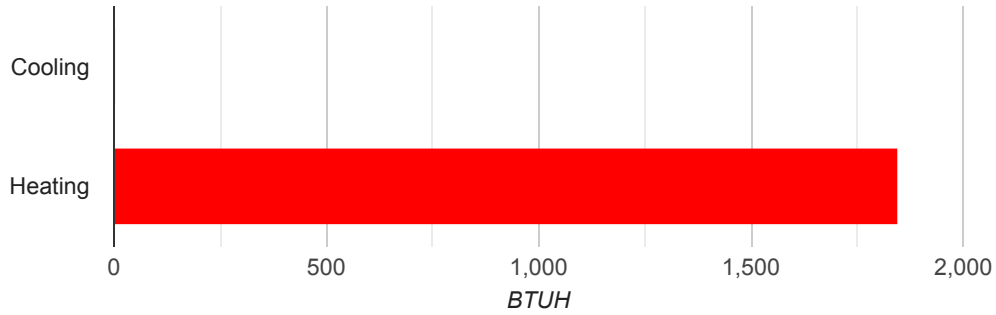
ROOM DETAIL

Room name: N Bedroom

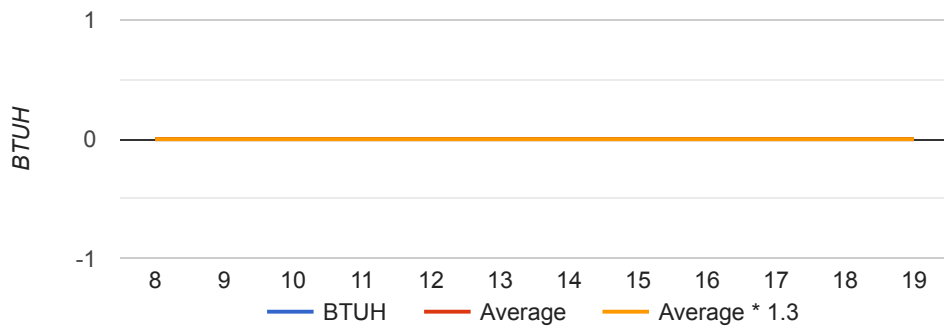
Heated square footage: 133
Cooled square footage: 0
Heated volume (above grade CF): 1,064
Cooled volume (above grade CF): 0
Exposed wall area (SF): 184

Total Cooling BTUH: 0
Total Heating BTUH: 1,846
CFM: 30

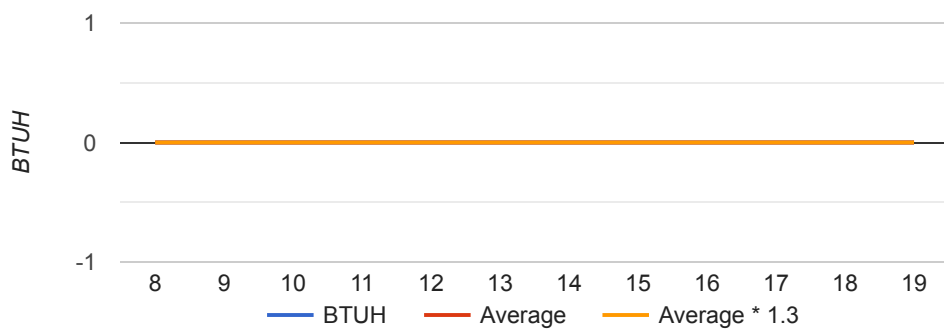
Load Calculation



AED Graph (mid-summer)



AED graph (fall)

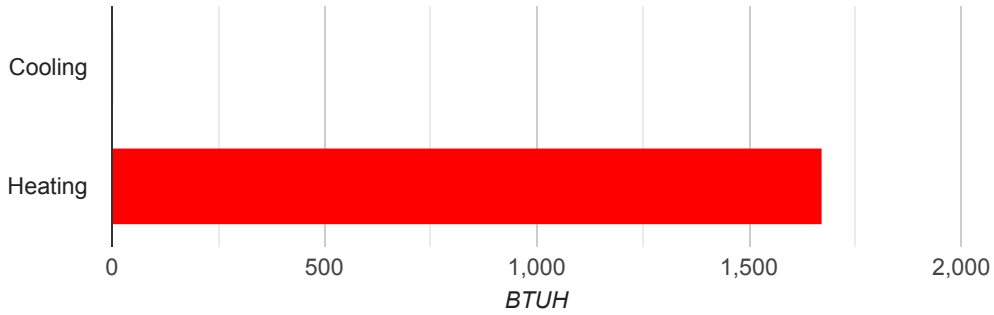


ROOM DETAIL

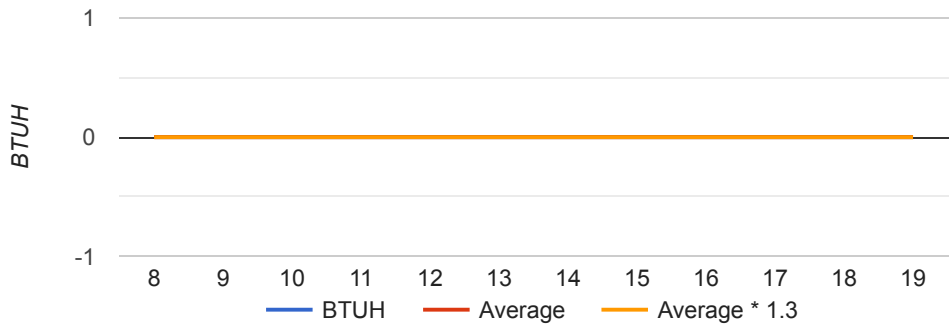
Room name: S Bedroom

Heated square footage:	66	Total Cooling BTUH:	0
Cooled square footage:	0	Total Heating BTUH:	1,672
Heated volume (above grade CF):	528	CFM:	27
Cooled volume (above grade CF):	0		
Exposed wall area (SF):	136		

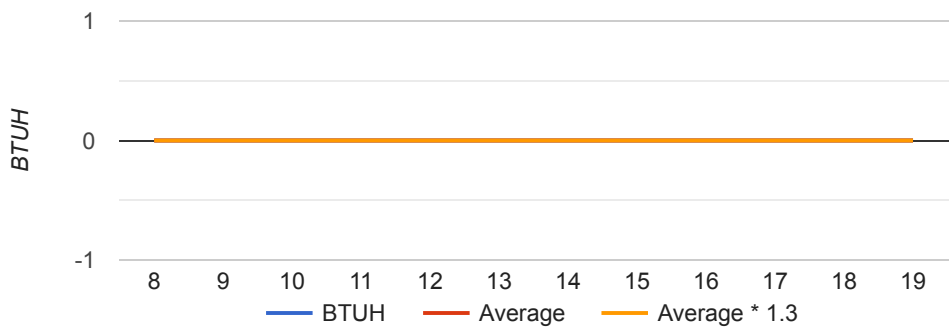
Load Calculation



AED Graph (mid-summer)



AED graph (fall)

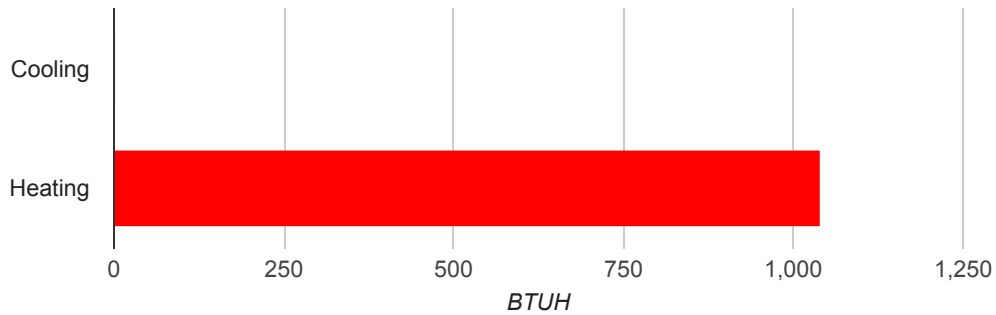


ROOM DETAIL

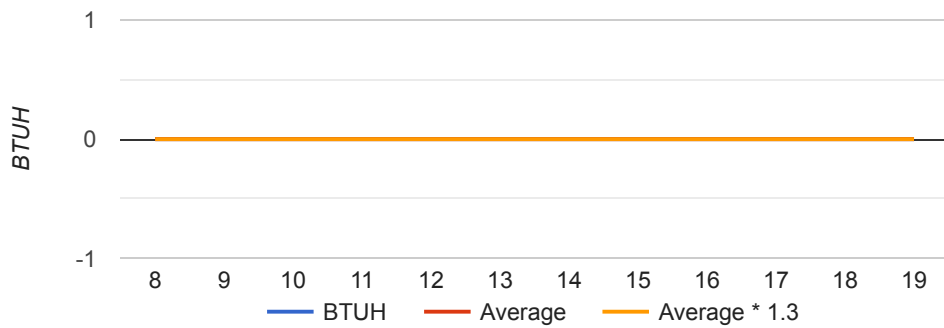
Room name: Bath

Heated square footage:	83	Total Cooling BTUH:	0
Cooled square footage:	0	Total Heating BTUH:	1,040
Heated volume (above grade CF):	664	CFM:	17
Cooled volume (above grade CF):	0		
Exposed wall area (SF):	80		

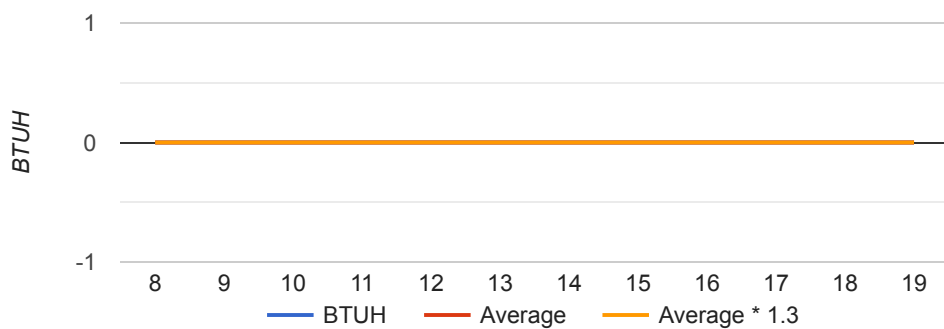
Load Calculation



AED Graph (mid-summer)



AED graph (fall)

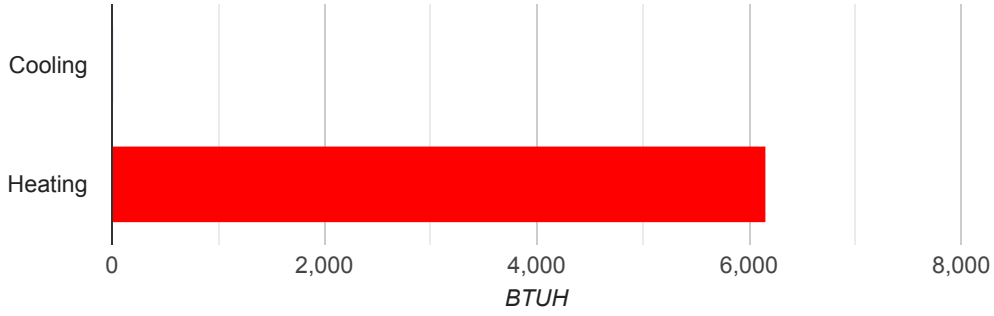


ROOM DETAIL

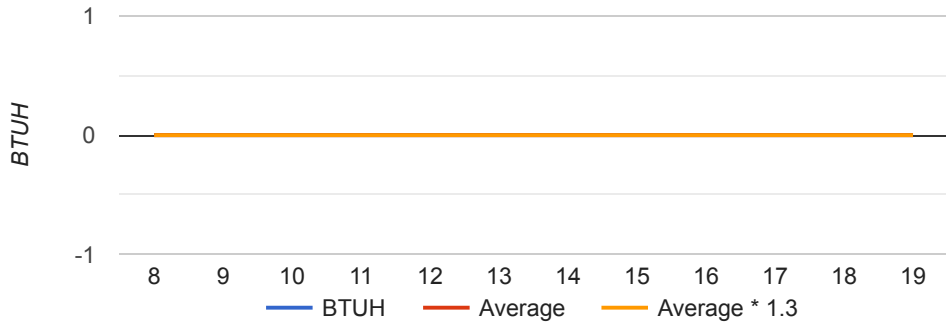
Room name: Living Room

Heated square footage:	333	Total Cooling BTUH:	0
Cooled square footage:	0	Total Heating BTUH:	6,152
Heated volume (above grade CF):	2,664	CFM:	101
Cooled volume (above grade CF):	0		
Exposed wall area (SF):	200		

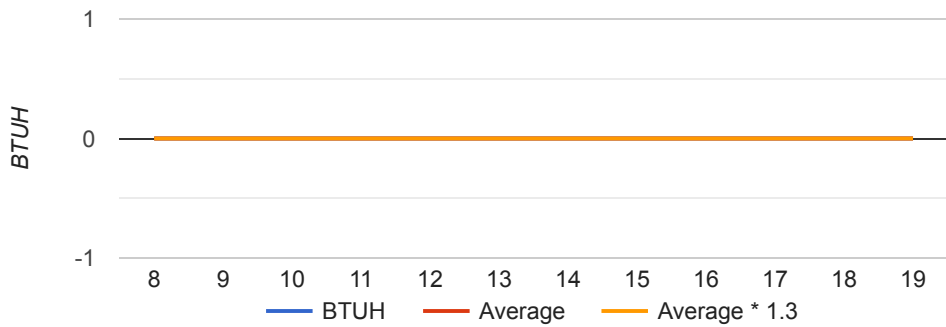
Load Calculation



AED Graph (mid-summer)



AED graph (fall)



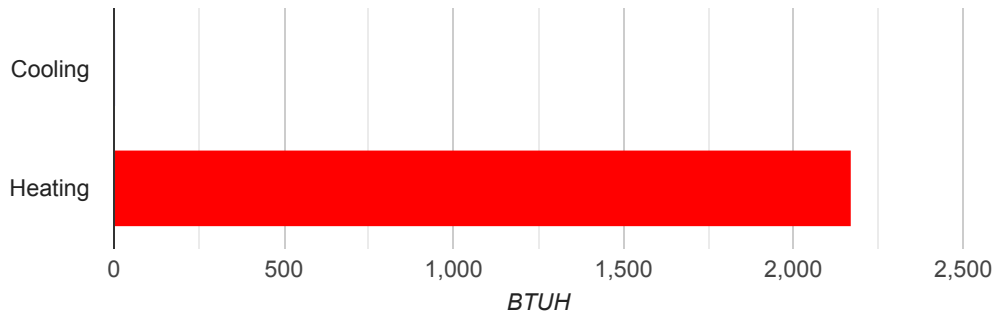
ROOM DETAIL

Room name: Dining

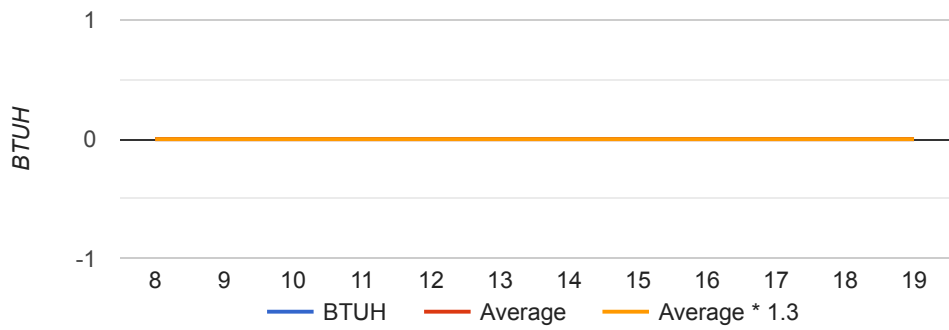
Heated square footage: 100
Cooled square footage: 0
Heated volume (above grade CF): 800
Cooled volume (above grade CF): 0
Exposed wall area (SF): 152

Total Cooling BTUH: 0
Total Heating BTUH: 2,170
CFM: 35

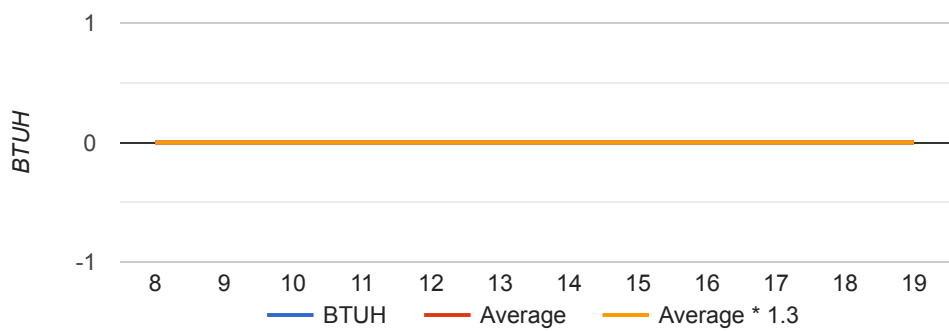
Load Calculation



AED Graph (mid-summer)



AED graph (fall)



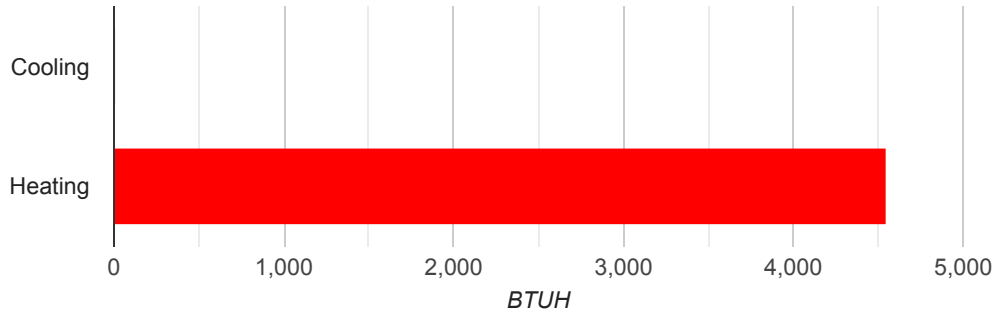
ROOM DETAIL

Room name: Kitchen

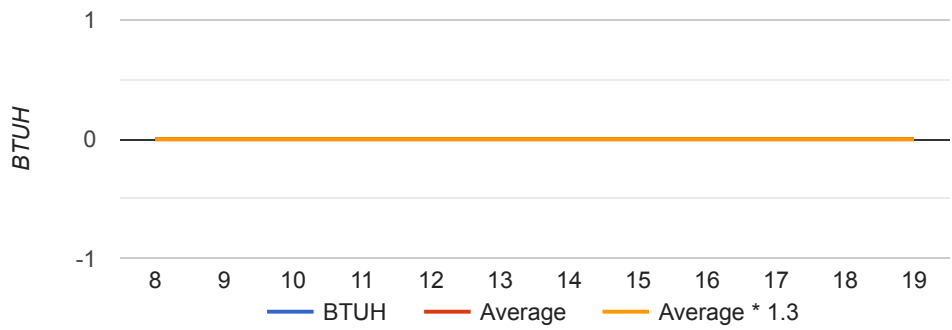
Heated square footage: 200
Cooled square footage: 0
Heated volume (above grade CF): 1,600
Cooled volume (above grade CF): 0
Exposed wall area (SF): 240

Total Cooling BTUH: 0
Total Heating BTUH: 4,539
CFM: 75

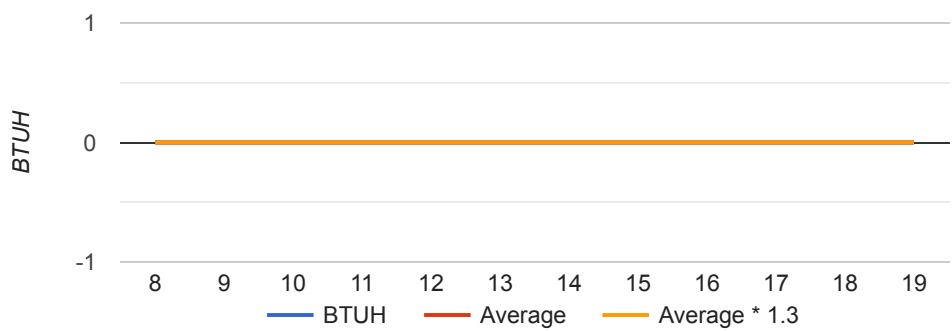
Load Calculation



AED Graph (mid-summer)



AED graph (fall)

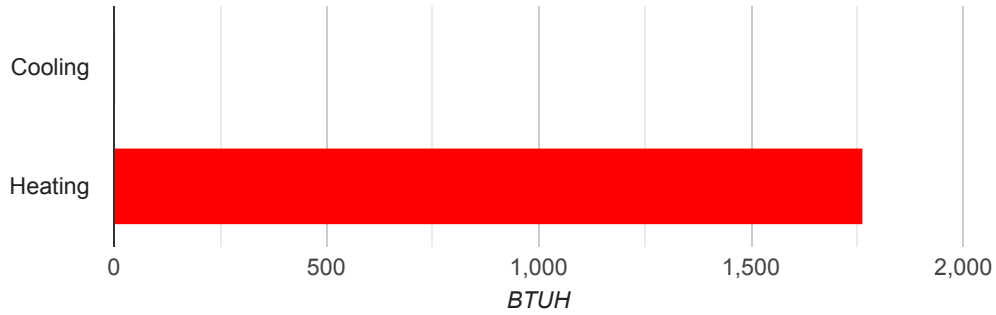


ROOM DETAIL

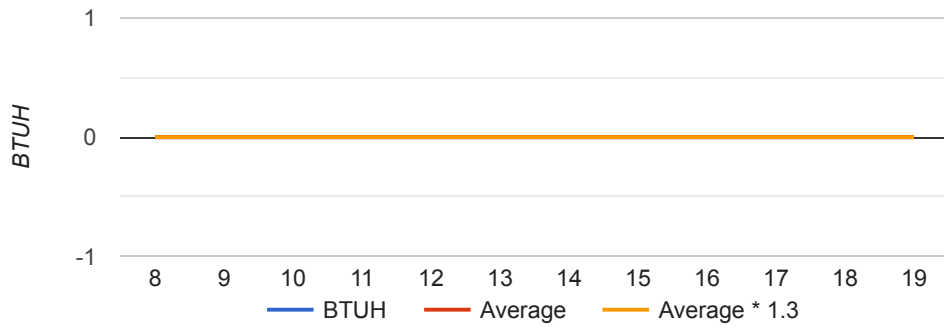
Room name: Laundry

Heated square footage:	85	Total Cooling BTUH:	0
Cooled square footage:	0	Total Heating BTUH:	1,762
Heated volume (above grade CF):	680	CFM:	29
Cooled volume (above grade CF):	0		
Exposed wall area (SF):	48		

Load Calculation



AED Graph (mid-summer)



AED graph (fall)

