



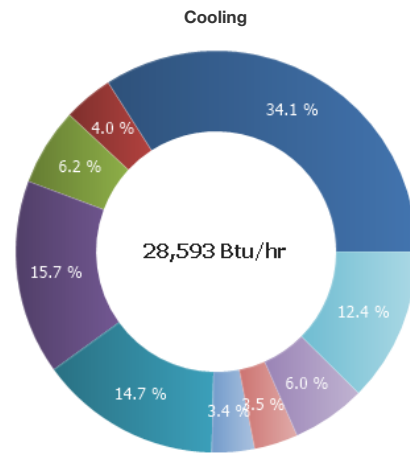
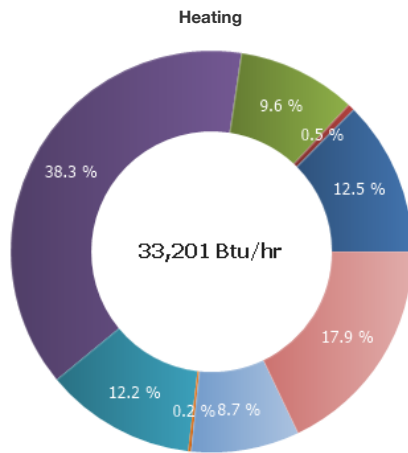
DC Rowhouse	
Site ID: <b>12209</b>	Heating: <b>33,200</b> BTU/hr
Area: <b>1,520</b> ft <sup>2</sup>	Cooling: <b>28,600</b> BTU/hr
Climate: <b>Washington, National AP</b>	Latent: <b>4,600</b> BTU/hr

**Site Information**

Contractor Name	<input type="text"/>	Contractor Company	<input type="text"/>
Project Name	DC Rowhouse	Subdivision	<input type="text"/>
Address 1	<input type="text"/>	Lot Number	<input type="text"/>
Address 2	<input type="text"/>	Plan/Model Number	<input type="text"/>
State/Province	Virginia	Builder	<input type="text"/>
Zip/Postal Code	20011	Year	1920
Default Insulation Level	2x4 weatherized w/vinyl windows	Weather Location	Washington, National AP

**Component Loads**

	Heating	Cooling	Color
Windows	4,164	9,743	
Skylights	180	1,144	
Doors	3,175	1,778	
Walls	12,725	4,479	
Ceiling	4,036	4,197	
Floors	79	0	
Ventilation	2,892	983	
Infiltration	5,950	1,012	
Ducts	0	0	
Additional Blower		1,707	
Internal Gains		3,550	
<b>Total:</b>	<b>33,201</b>	<b>28,593</b>	

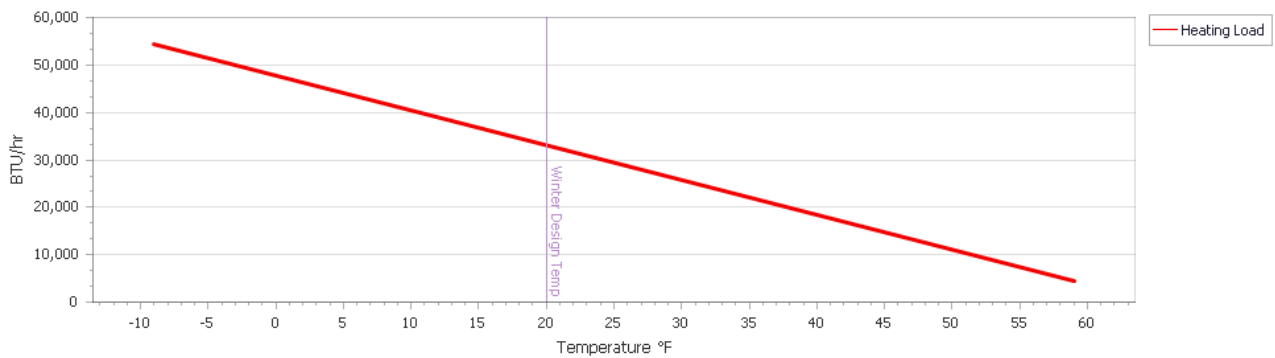


**Room Data and Loads**

Room Name	Suggested Ducts	Actual Ducts	Duct Size	CFM/Duct	Actual CFM Measured	Floor Area	Ext. Length	Height Override	Uncond Ceiling	Uncond Floor	Heating Load	Cooling Load
Kitchen	<input type="text"/>	<input type="text"/>	3	0	<input type="text"/>	116	0.0	<input type="text"/>	0 %	0 %	230	495
Bathroom 1	1	<input type="text"/>	3	22	<input type="text"/>	13	2.8	<input type="text"/>	0 %	0 %	627	327
Dining Room	1	<input type="text"/>	3	100	<input type="text"/>	177	17.3	<input type="text"/>	0 %	0 %	3,081	2,229
Living Room	2	<input type="text"/>	3	91	<input type="text"/>	215	30.2	<input type="text"/>	0 %	0 %	5,251	4,590
Sunroom	2	<input type="text"/>	3	70	<input type="text"/>	117	21.7	<input type="text"/>	0 %	50 %	3,969	3,315
Bedroom 1	2	<input type="text"/>	3	92	<input type="text"/>	156	25.6	<input type="text"/>	100 %	0 %	5,344	4,379
Bedroom 2	1	<input type="text"/>	3	83	<input type="text"/>	93	7.8	<input type="text"/>	100 %	0 %	2,116	2,057
Bedroom 3	1	<input type="text"/>	3	69	<input type="text"/>	96	8.0	<input type="text"/>	100 %	0 %	2,081	1,468
Bedroom 4	1	<input type="text"/>	3	118	<input type="text"/>	139	13.7	<input type="text"/>	100 %	0 %	3,336	2,958
Bathroom 2	1	<input type="text"/>	3	76	<input type="text"/>	50	0.0	<input type="text"/>	100 %	0 %	704	1,742
Bonus Room	1	<input type="text"/>	3	116	<input type="text"/>	72	17.1	<input type="text"/>	100 %	0 %	3,246	2,636
Foyer	1	<input type="text"/>	3	45	<input type="text"/>	93	6.7	<input type="text"/>	0 %	0 %	1,414	889
Walk-in Closet	1	<input type="text"/>	3	36	<input type="text"/>	18	6.0	<input type="text"/>	100 %	0 %	1,005	446
Nook	1	<input type="text"/>	3	7	<input type="text"/>	25	0.0	<input type="text"/>	100 %	0 %	191	254
Bathroom 3	1	<input type="text"/>	3	14	<input type="text"/>	50	0.0	<input type="text"/>	100 %	0 %	379	505
Hallway	1	<input type="text"/>	3	9	<input type="text"/>	30	0.0	<input type="text"/>	100 %	0 %	227	303
<b>Total</b>	18	0				1,462					33,201	28,593

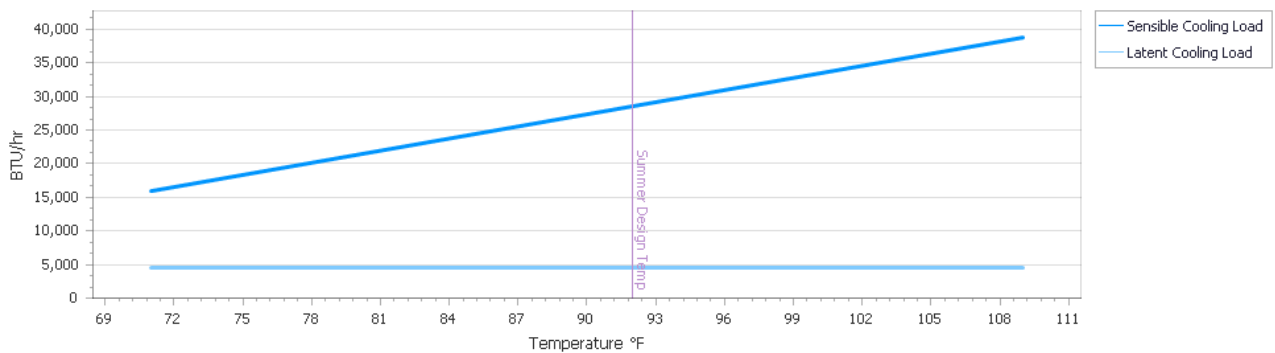
### Heating

Balance Point Max capacity balances at: **18.9°** (34,000 BTU)

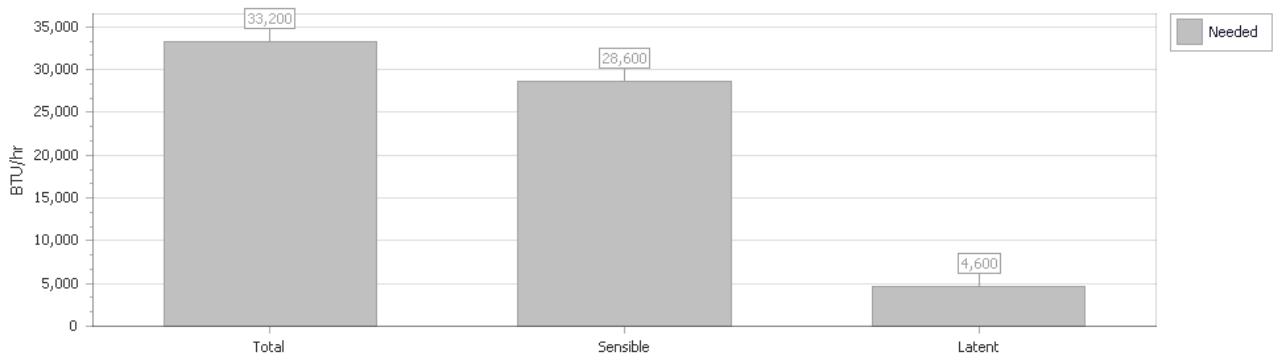


### Cooling

Balance Point Capacity balances at: **92.0°** (28,600 BTU)



### Required Cooling at Summer Design Temp (92°)



### HVAC Design and Actual System Data

Heating System  Cooling System

	Manufacturer	Model	Nominal size (BTU/hr)
Furnace	<input type="text"/>	<input type="text"/>	<input type="text"/>
Heat Pump or AC Condenser	<input type="text"/>	<input type="text"/>	<input type="text"/>
Fan Coil	<input type="text"/>	<input type="text"/>	<input type="text"/>

	Calculated	Specified
Total Heating Load	<input type="text" value="33,200"/>	<input type="text" value="34,000"/>
Sensible Cooling Load	<input type="text" value="28,600"/>	<input type="text" value="28,593"/>
Latent Cooling Load	<input type="text" value="4,600"/>	<input type="text" value="4,600"/>
Sensible Ratio	<input type="text" value="0.86"/>	<input type="text" value="0.86"/>

	Heating	Cooling
Blower Default (CFM)	<input type="text" value="345"/>	<input type="text" value="1,202"/>
Blower Override (CFM)	<input type="text"/>	<input type="text"/>

### Building Characteristics

Conditioned Floor Area (sqft)	<input type="text" value="1,520"/>	Slab on Grade %	<input type="text" value="0"/>
Total Room Area	<input type="text" value="1,460"/>	Conditioned Basement %	<input type="text" value="100"/>
Wall Height	<input type="text" value="8.9"/>	Unconditioned Basement or Crawl Space %	<input type="text" value="0"/>
Bedrooms	<input type="text" value="4"/>		

### Window Orientation

Room Name	↑ N	↗ NE	→ E	↘ SE	↓ S	↙ SW	← W	↖ NW	Door	Skylight
Kitchen	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Bathroom 1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	15.0	<input type="text"/>
Dining Room	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	28.3	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Living Room	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	28.3	<input type="text"/>	28.3	<input type="text"/>	<input type="text"/>	<input type="text"/>
Sunroom	<input type="text"/>	<input type="text"/>	22.8	<input type="text"/>	15.2	<input type="text"/>	<input type="text"/>	<input type="text"/>	17.0	<input type="text"/>
Bedroom 1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	10.9	<input type="text"/>	21.8	<input type="text"/>	15.0	<input type="text"/>
Bedroom 2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	10.9	<input type="text"/>	15.0	<input type="text"/>
Bedroom 3	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	15.0	<input type="text"/>
Bedroom 4	<input type="text"/>	<input type="text"/>	14.0	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	15.0	<input type="text"/>
Bathroom 2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	15.0	9.0
Bonus Room	<input type="text"/>	<input type="text"/>	14.0	<input type="text"/>	13.7	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Foyer	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	20.0	<input type="text"/>
Walk-in Closet	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Nook	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Bathroom 3	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Hallway	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Total Window Square Footage (sqft)	<input type="text" value="335"/>
Total Room (Floor) Square Footage (sqft)	<input type="text" value="1,460"/>
Total Window to Floor Ratio (%)	<input type="text" value="23.0 %"/>

### Duct Characteristics

Duct Material	<input type="text" value="Wire Helix (flex)"/>	Blower CFM	<input type="text" value="345"/>
Attic %	<input type="text" value="0"/>	Max CFM/Register	<input type="text" value="125"/>
Conditioned Area %	<input type="text" value="100"/>	Friction Rate	<input type="text" value="0.00"/>
TEL Calculated	<input type="text" value="0"/>	Unconditioned Basement or Crawl Space %	<input type="text" value="0"/>
TEL Override	<input type="text" value="0"/>		

**Building Data**

	Selected	Override
Heating 99% Dry Bulb	20	
Cooling 1% Dry Bulb	92	
Winter Thermostat Setpoint (°F)	70	
Summer Thermostat Setpoint (°F)	75	
Daily Range	Mediu	None
Summer Design Grains	48	
Elevation (ft)	66	
Latitude (°N)	38	
Indoor RH	50	
Number of People	5	
Appliance/Lighting Load (BTU/hr)	2,400	
Internal Gains	3,550	3,550
Ventilation CFM	53	
Heating Duct Multiplier	0 %	
Cooling Duct Multiplier	0 %	
% Basement Below Grade	75 %	
ASHRAE 152 Duct area default	<input type="checkbox"/>	
Heated slab on grade	<input type="checkbox"/>	

	Selected	Override
Additional Blower Load	1707	
Internal Shade Coefficient	1.0	
Ceiling U-Value	0.049	R-7
Floor U-Value	0.047	Frame Floor R-0
Wall U-Value	0.097	R-0
Basement Wall U-Value	0.093	R-0
Basement Floor U-Value	0.025	Basement, R-0
Slab U-Value	1.180	None
Door U-Value	0.500	
Window U-Value	0.400	
Window SHGC	0.580	
Duct Insulation	(R-4)	None
Duct Leakage	Average	None
Heating ACH	0.500	
Cooling ACH	0.250	

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