Project Summary
1 AWHP
Energy Vanguard

Job: 26014 JSDT-V Hullsiek
Date: April 14, 2026
By: Sophie Ashley
Plan: 26014 Rev0

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Project Information

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Notes:

Design Information

Weather: St Paul Downtown, MN, US

Winter Design Conditions

Outside db	***-15***	°F
Inside db	70	°F
Design TD	85	°F
Ventilation Method	ASHRAE 62.2-2010	

Summer Design Conditions

Outside db	***86***	°F
Inside db	78	°F
Design TD	8	°F
Daily range	M	
Relative humidity	45	%
Moisture difference	33	gr/lb

Heating Summary

Structure	16732	Btuh
Ducts	0	Btuh
Central vent (0 cfm)	0	Btuh
Humidification	0	Btuh
Piping	0	Btuh
Equipment load	16732	Btuh

Sensible Cooling Equipment Load Sizing

Structure	8384	Btuh
Ducts	0	Btuh
Central vent (0 cfm)	0	Btuh
Blower	0	Btuh
Use manufacturer's data	y	
Rate/swing multiplier	1.00	
Equipment sensible load	8384	Btuh

Infiltration

Method	Blower door
Shielding / stories	3 (partial) / 2
Pressure /ACH /AVF	50 Pa / 0.8 / 311 cfm

	Heating	Cooling
Area (ft²)	2880	2880
Volume (ft³)	23328	23328
Air changes/hour	0.09	0.04
Equiv. AVF (cfm)	36	14

Latent Cooling Equipment Load Sizing

Structure	1111	Btuh
Ducts	0	Btuh
Central vent (0 cfm)	0	Btuh
Equipment latent load	1111	Btuh
Equipment Total Load (Sen+Lat)	9494	Btuh
Req. total capacity at 0.70 SHR	1.0	ton

Heating Equipment Summary

Make	NTI Verta
Trade	
Model	NHP32-036
AHRI ref	
Efficiency	0 HSPF
Heating input	
Heating output	0 Btuh @ 47°F
Temperature rise	0 °F
Actual air flow	0 cfm
Air flow factor	0 cfm/Btuh
Static pressure	0 in H2O
Space thermostat	

Capacity balance point = 0 °F

Backup: NTI FTVN085
Input = 85000 Btuh, Output = 79000 Btuh, 93 AFUE

Cooling Equipment Summary

Make	NTI Verta
Trade	
Cond	NHP32-036
Coil	Control32-7
AHRI ref	
Efficiency	0 SEER
Sensible cooling	0 Btuh
Latent cooling	0 Btuh
Total cooling	0 Btuh
Actual air flow	0 cfm
Air flow factor	0 cfm/Btuh
Static pressure	0 in H2O
Load sensible heat ratio	0.88

Bold/italic values have been manually overridden

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.