

Final Inspection

Julkowski Inc

5983 Voyageurs Trail, Biwabik, MN 55708



Project Details

Address: 5983 Voyageurs Trail, Biwabik, MN 55708

Inspection Date: Thu Jul 20 2023

Gas Utility



Electric Utility



Testing Information

Testing Details

Volume: 38939 (cubic ft)

CFA: 2950 (sq ft)

Blower Door: 486 CFM

ACH: 0.75 @ 50PA

Projected Savings Above Baseline

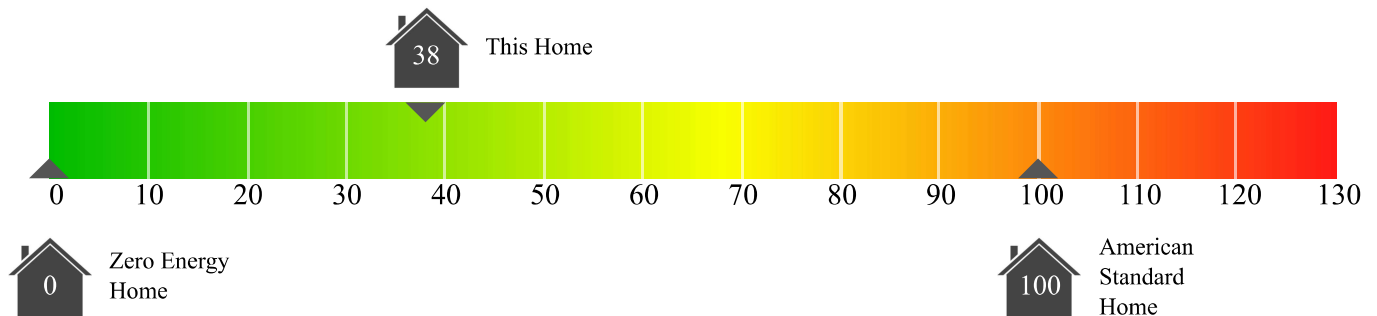
Gas: 52.9%

Electric: 20.6%

Total: 48.1%*

* Total energy converts all gas and electric usage to the same units before calculating the percent. As a result, the Total is not the sum of gas and electric percent savings.

HERS Index



Good Building Practices



SIPs roof in bedrooms and behind kneewalls appear well sealed



No air infiltration around window trim

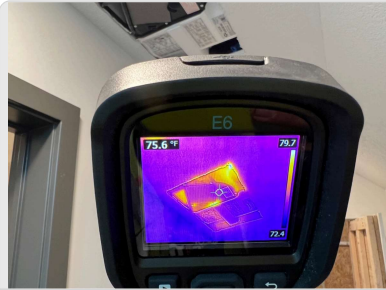


No air infiltration around range hood

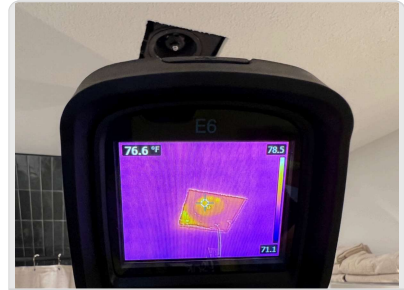
Areas for Improvement



Minor air infiltration around seam between SIPs roof and wall in attic/knee wall space over garage



Air infiltration around ERV fresh air intake ducts



Air infiltration around bath exhaust fan ductwork



Air infiltration around ERV intake/exhaust penetrations to outside



Air infiltration around flush-mount LED light fixtures above laundry room (note conditioned space above—possible air infiltration into/through framed floor assembly)



Minor air infiltration around exterior wall electrical boxes



Possible air infiltration (or missing insulation) at soffit above front entry door. Note soffit is within conditioned space.



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Air infiltration around vaulted ceiling beam above kitchen



Minor air infiltration around back patio door top seal

Air infiltration around vaulted ceiling beam above fireplace/living room

Air infiltration around vaulted ceiling beam above fireplace/living room

Other Observations



Heat Pump/Furnace is primary for cooling, secondary for heating. Primary heat source is in-floor hydronic (see boiler photos below).



SIPs framed house (including roof system), all ductwork within conditioned space. Did not perform duct Leakage to Outside testing. Note living room supply and return registers located ~12-14ft up, unable to access and seal off for testing.



3x cartridge/ductless ERVs in house



ERV wiring incomplete, unable to power on or test



Experimental testing of air infiltration through ERVs. Approx 12-13 CFM each, likely being pulled through fresh-air/intake ductwork (not dampered)



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