



JOHNSON
ENVIRONMENTAL

Project Case Study

Platte River Apartments

800 W Richards Street, Douglas, WY:

About the Project

Type: Multifamily apartment complex

Unit Size: 727-964 square feet, 1-2 bedrooms

Performance: ENERGY STAR certified and Hers index rating

Website: [Platte River Apartments](#)

Location: Douglas, WY

Developer: BlueLine Development, INC.

Verifier: Johnson Environmental

Architect: VanDeWalle Architects

Structural Engineer: Rise Structural Associates INC.

Mechanical Engineer: Innovative Engineering Solutions LLC.



Features:

-Annual savings of up to \$6,516 per unit

-ADA wheelchair accessible

-Carbon monoxide monitors

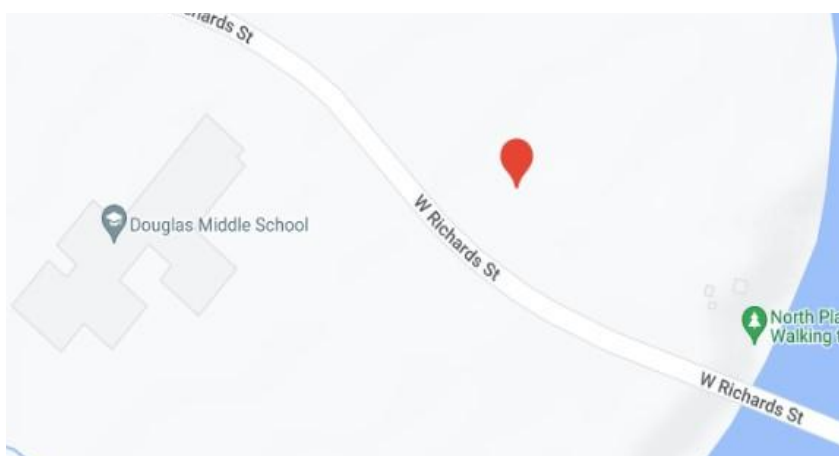
-Dependable roofing, 30-year warranty

-Mold reduction techniques/products used

-Drought resistance plants and irrigation systems

Overview:

This apartment complex is unique because it was just recently finished in November of 2021. They are offering new and updated appliances to go along with the luxury feeling of each building. Platte River apartments consist of two buildings each with two stories for a total of 20 units. The units are considered to be adorable housing which means renters earning 60% of the median income qualify to rent at Platte River.



Energy Code Checklist

→Energy Certificate:

- ENERGY STAR certified
- ENERGY STAR certified appliances
- Hers rating index between 51-53

→Window value:

- U-value=0.28

→Heating/cooling:

- Seasonal energy efficiency ratio (SEER) cooling system of 14
- Air furnace 96% annual fuel utilization efficiency (AFUE)

→Lighting:

- LED lighting

→Tests:

- Blower door test

→Water heating:

- Electric, .95 EF

→Green energy:

- 75.6 ton carbon dioxide diversion

→Insulation/infiltration:

- R 23 wall insulation
- Infiltration: Htg: 632 Clg: 632 CFM50
- Total duct leakage: 76 CFM @ 25pa

Douglas, WY

Douglas Wyoming is located in a nice quiet county with several schools from kindergarten-12th grade. Conveniently located a few miles away from shops, attractions, and walking trails. This small town has the homey feel to it while only being an hour away from the second largest city in the state, Casper Wyoming.

Verifiers voice:

Johnson Environmental specializes in consulting, building performance, testing and rating, modeling, and affordable construction, BlueLine Development partnered with Johnson Environmental in order to get the proper testing and certifications needed. By doing this, the development was able to follow the guidelines of ENERGY STAR and the Hers rating index to receive a score of 51-53.



Chart of energy cost and consumption

Annual Energy Costs	Annual Consumption (kWh)
Heating.....\$91	Heating..... 75 (kWh)
Cooling.....\$41	Cooling..... 404 (kWh)
Water heating.....\$216	Water heating..... 2127 (kWh)
Lights and appliances..... \$307	Lights and appliances..... 3025 (kWh)
Total annual energy cost per year..... \$655 per unit	Total energy consumption..... 5632 (kWh)

*Based on a two bedroom unit. Prices may vary depending on monthly usage.