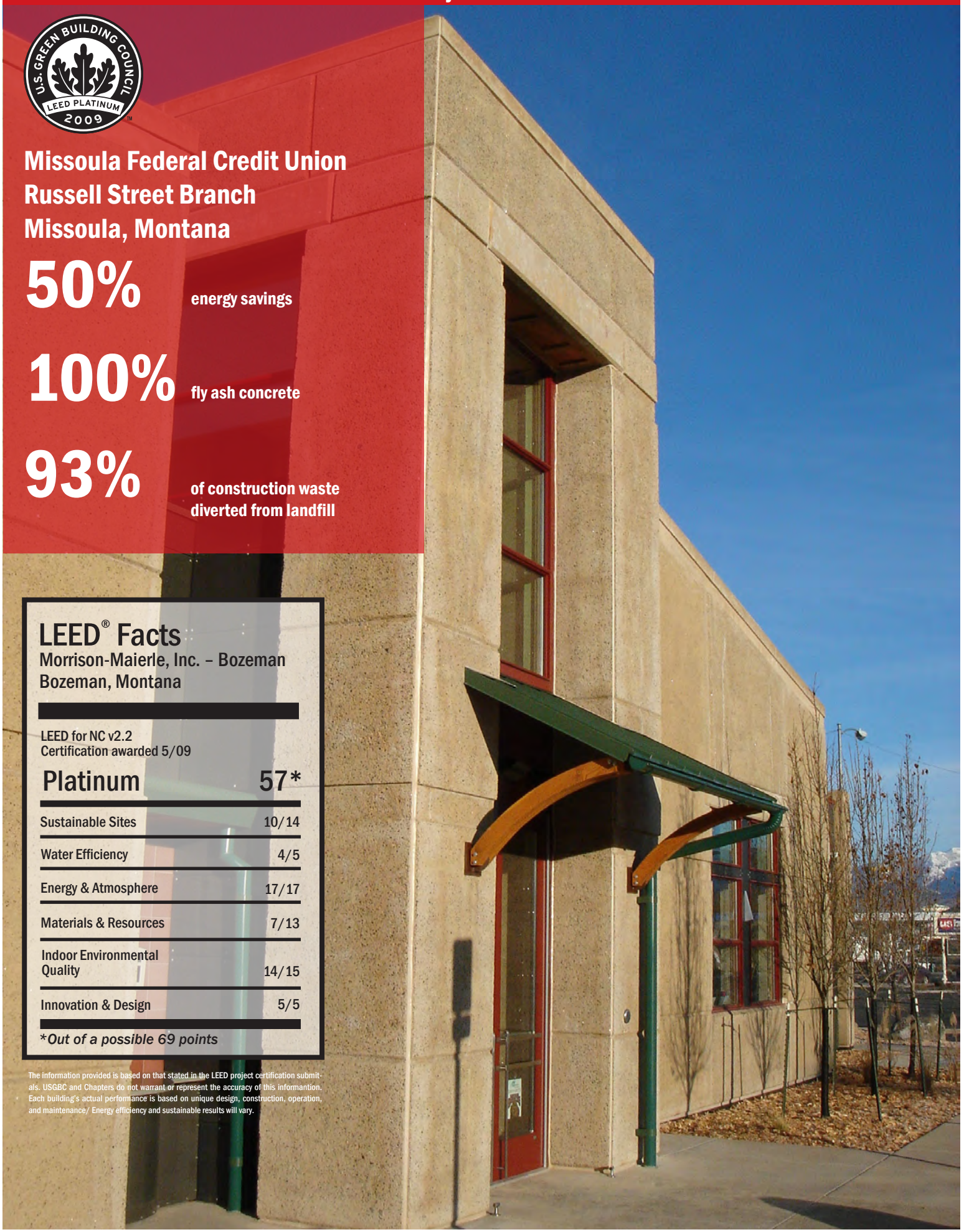
Project Profile

Missoula Federal Credit Union
Russell Street Branch
Missoula, Montana

50% energy savings

100% fly ash concrete

93% of construction waste diverted from landfill



LEED® Facts

Morrison-Maierle, Inc. – Bozeman
Bozeman, Montana

LEED for NC v2.2
Certification awarded 5/09

Platinum	57*
Sustainable Sites	10/14
Water Efficiency	4/5
Energy & Atmosphere	17/17
Materials & Resources	7/13
Indoor Environmental Quality	14/15
Innovation & Design	5/5

**Out of a possible 69 points*

Missoula Federal Credit Union, Russell Street Branch

Promoting our Mission Statement

MFCU leading the way among Green Financial Institutions

PROJECT BACKGROUND

Seeing the need for a new branch in central Missoula, the new Missoula Federal Credit Union (MFCU) Russell Street Branch has set a new standard for Green Building in Western Montana. Encouraged by a great level of enthusiasm and commitment from the Missoula Federal Credit Union staff and board, the design team was pushed to design the most environmentally-responsible building possible. The effort to attain LEED Platinum certification is a result of MFCU's commitment to social, environmental and economic improvements.

STRATEGIES AND RESULTS

The building pioneered the use of 100% fly ash (a waste product of coal-fired power plants) and recycled glass aggregate 'concrete', eliminating Portland cement from the building.

Locally-sourced sustainably-harvested products were prioritized. Wood wall framing was sourced from North Slope Sustainable Wood. Interior wood casing, trim, and interior lite framing were sourced from sunk logs exposed during the removal of the Bonner and Milltown dams outside of Missoula.

The site selected had been previously used a lumber mill (not virgin land), and was located in central Missoula. The site is located within a half mile of fourteen community services and one residential district with a density of 10.47 units per acre. Using a previously-used site within a central location reduces sprawl and shortens commute and visitor vehicle usage.

Bicycle storage facilities have been provided to serve 15% of all building users, measured at peak occupancy, and shower facilities for 5.8% of the FTE building occupants, which helps encourage non-vehicle transportation to the building.

The project has provided 20,484 sf of open space, exceeding local zoning requirements by 96.5%.

62.7% of non-roof impervious surfaces have been paved with highly-reflective materials, and 76.7% of the roof surface has a SRI value of 95, reducing heat island effect from site paving and roof surfaces.

Interior and exterior light fixtures were selected and located to minimize lighting power densities and light trespass outside the project site.

Native and drought-tolerant plant species were selected around the site perimeter that will not require a permanent irrigation system after establishment. Adjacent to the building, a grey-water collection and distribution system provides water to plant species that are not drought tolerant to our climate. No potable water will be used for irrigating the site.

Inclusion of dual flush water closets, ultra low flow lavatories, a low-flow shower fixture and kitchen sink reduce the amount of potable water used by 45.5% from a calculated baseline design.

Energy efficiency measures were incorporated into the building design, resulting in a performance rating of 50.8% using the ASHRAE 90.1-2004 Appendix G methodology.

On-site photovoltaic (PV) energy provides 12.69% of the project's energy.

The project has a 2-year purchase agreement to procure 77.5% of the project's annual electric energy from a power supply that meets the Green-E definition for renewable power.

93.1% of on-site generate construction waste was diverted from landfill.

40.8% of the total building materials content, by value, were manufactured using recycled materials.

55.1% of the total building materials value is comprised of building materials and/or products that have been extracted, processed and manufactured within 500 miles of the project site.

80.7% of regularly occupied spaces are daylighted with a minimum 2% glazing factor, and 96.4% of regularly occupied spaces have access to views.

" This building is our mission statement come to life, "...MFCU promotes its members' financial well-being through our commitment to innovation, education and exceptional service." Because of the innovative, new ideas we implemented in this building, we will be able to reduce our ongoing, long-term operational expenses. The technology we are utilizing creates efficiencies in serving our members and the opportunity to educate our members and our community about the 'green' aspects of the project allows us to speak to our community in new ways. We have become the "green" financial institution in our market...and we're proud to carry that moniker."

Joni Walker, Senior Vice President, MFCU

Architect: MacArthur, Means & Wells, Architects
Civil Engineer: WGM Group
Commissioning Agent: EMC Engineers
Contractor: Gordon Construction
Developer: Missoula Federal Credit Union
Electrical Engineer: Maxus Consulting Engineers
Interior Designer:
Landscape Architect: Sherry, Pratt, Van Voorhis
LEED Consultant: Design Balance
Lighting Designer:
Mechanical Engineer: JM Engineering
MEP Engineer:
Owner: Missoula Federal Credit Union
Plumbing Engineer: JM Engineering
Structural Engineer: Beaudette Consulting Engineers
Concrete Mix Design: Western Transportation Institute
Recycled Glass Aggregate provided by Montana Department of Environmental Quality

Project Size: 6,711 square feet

Photography Courtesy of: MMW Architects