HYDROBLOK™

THE WALL SYSTEM That Changes Everything

PROJECT PROFILE

Wellness Begins at the Exterior Envelope

With HydroBlok HB One CI

How a Utah architect turned a mold-scarred past into a wellness-first "forever home" by rethinking the exterior wall system.

When Jeff Knighton, Principal Architect and Founder of Knighton Architecture, set out to build his family's own home, wellness was a priority. After all, this building site was destined to be much more than a proud place to call home… his family's health was at stake. Following living in a rental property that was riddled with hidden mold and mildew, Jeff vowed "to get the outside right" before attempting to improve indoor air quality through interior venting and conditioning for this new construction.

"The real risk is what you can't see," Jeff explains. "The black mold led to several health-related issues for our family… especially for my wife and a couple of the kids. Only after extensive testing did we trace our wellness problems back to our rental unit. Which fundamentally changed my approach as both an architect and homeowner."

Jeff seized the dual opportunity for himself and his family: a home that celebrates indoor air quality while achieving his vision for a modern, mountain-view retreat with multiple cladding finishes that included stucco, stone, as well as plank siding.

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>
> — Jeff Knighton, Principal Architect, Knighton Architecture

"Traditional multi-layer exterior wall assemblies can become really problematic," added Knighton, "So we have been on the lookout for new innovative solutions that are better than just 'good enough'"



PROJECT SNAPSHOT

Location:
Mapleton, Utah

Architect:
Jeff Knighton, Knighton Architecture

Project Type:
Custom Single-Family Residential ("Forever Home")

Climate Zone:
Mountain

Exterior System:
HydroBlok HB One CI

Cladding Types:
Stucco · Stone · PVC Plank Siding

Wall Assembly:
HB One CI + closed-cell roof foam + Energy Recovery Ventilator (ERV)

Key Priorities:
Wellness · Indoor Air Quality · Moisture Management · Energy Efficiency



That's precisely why he specified the HydroBlok HB One CI integrated wall system as the foundation of his construction strategy — a transformative, system-level solution — that unites water-resistant performance, durability, and ease of installation.

By prioritizing the exterior envelope, Jeff ensured that his family's healthy environment would be prioritized… from the outside in.

In fact, his approach embodies a rising movement in homebuilding. Wellness real estate investment reached $584 billion globally in 2024 and is forecast to surpass $1.1 trillion by 2029 (Global Wellness Institute).

As Jeff explains, "I'm clearly not the only one seeking wellness in my home. This is where the entire industry continues to head."

Jeff Knighton made his home a wellness-first project from the start. He chose the lot for mountain views and oriented the house to bring in morning light. The layout connects indoor and outdoor spaces.

"I designed the house, very intentionally to connect with the outdoors… maximizing the views of the mountains," said Jeff.

Determined to avoid past indoor air quality-related issues, Jeff focused on a moisture-resistant wall assembly – as well as upgraded insulation including closed-cell roof foam -- and fresh air ventilation. He made it a point to personally oversee construction to ensure consistent, high job site standards. "I kept a vigilant watch… making sure during construction we didn't have any leaks," added Knighton.

When selecting an exterior wall system, HydroBlok was the ideal solution for its all-in-one advantage: combining waterproofing, insulation, lath, and scratch coat in a single board. Resulting in fewer seams for water to penetrate -- more consistent insulation -- and a faster, simpler installation process.

"HydroBlok went up really fast… it was almost like you blinked and the crew was finished," explained Jeff. My experience with HydroBlok not only benefited my family's home; it also transformed my approach to future projects… including restaurants, where water vapor is a constant challenge."

"As an architect, I depend on solutions that bring peace of mind. With advanced moisture management, superior energy efficiency, and industry-leading reliability, my buildings are specified with products that offer long-term comfort and security."

"The HB One CI system provides consistent thermal performance and a simplified exterior approach. This made installation straightforward and reliable, "Knighton notes. "The continuous insulation addresses the thermal bridging on the studs. Having that everywhere… was definitely a plus."

Importantly, prioritizing the building envelope didn't compromise the aesthetics.

"The home achieves the open, modern design I envisioned — filled with light and views — while serving as a gathering place for my family and friends." As Jeff explains, "This is my forever home."



"This is my forever home."

— Jeff Knighton

CONTACT INFORMATION
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