Shopworks



Laurel House | Photo Credit: Matthew Staver Photography

STUDIO SPOTLIGHT BY THINK WOOD



Trauma-Informed Design + Wood Create Buildings That Heal When Denver-based architecture studio <u>Shopworks</u> chooses to design with wood for its affordable and community projects, the reasoning goes far beyond aesthetics.

Along with its correlation to <u>biophilic health benefits</u>, wood is one of the materials of choice recommended by the firm when designing to the principles of trauma-informed design (TID). TID is a relatively new architectural movement and Shopworks is at its forefront, making it a linchpin of its practice. In fact, the firm has literally written the <u>manual</u> on the topic, along with several other helpful <u>resources</u> to help expand the impact of TID in communities around the country.

In partnership with the University of Denver <u>Center for Housing and</u> <u>Homelessness Research</u> and the <u>Colorado Housing and Finance</u> <u>Authority</u>, the firm has been in the vanguard when it comes to testing and defining trauma-informed design principles. This includes careful design considerations to ensure a building doesn't feel overly institutional or even inadvertently hostile, perpetuating and triggering additional trauma for its occupants.

Holtzinger says deinstitutionalizing spaces can be as simple as making warmer, more vernacular material choices like using "organic, lessindustrial materials, such as wood, natural fibers, or fabrics that provide insulation for sound and can absorb and transmit pleasant scents."

While TID is most often seen in supportive housing, education, community services, and health care buildings serving more vulnerable populations, any setting and any building could benefit from trauma-informed design. "The reality is nearly 70% of Americans are impacted by some kind of trauma—it is not limited to individuals who have experienced incarceration or homelessness," Holtzinger says.

ABOUT SHOPWORKS

Shopworks was founded in 2013 with a central focus on affordable housing and projects that support community health and well-being. One of its first clients focused on helping women and transgender individuals experiencing homelessness—led the Shopworks team to delve deep into what it meant to design for resilience and trauma-informed care. The firm has been growing this unique expertise ever since.

FROM THE STUDIO

With trauma-informed design, buildings become the "first thing an occupant experiences and TID is the first line of therapy in affordable housing and community projects," says Shopworks founder Chad Holtzinger. "We're raising the awareness [of] how mental health is being neglected by the built environment, and how we can change that for the better."

What Is Trauma-Informed Design?

Trauma-informed design, according to the <u>TID Society</u>, an organization that focuses on turning trauma science into design practice, is about integrating the principles of traumainformed care, as originally established by the Substance Abuse and Mental Health Services Administration (SAMHSA) and continually evolving, into design. The goal is to create physical spaces that promote safety, well-being, and healing.

TID in affordable housing and community facilities is characterized by spacious designs, ample sunlight, calming interiors, and the abundant use of natural materials like exposed timber. But Holtzinger emphasizes that it is not merely a checklist of features—rather, it's both a process and outcome that makes understanding and healing trauma through design a core value.

Organizing Principles of Trauma-Informed Design

According to Shopworks' TID design principles, there are three foundational concepts that relate to architecture and the way trauma works on the body: sensory boundaries, nested layers, and identity anchors.



Identity Anchors

To combat an institutional feeling in spaces, Shopworks promotes architecture and design features that express diversity and allow occupants to see themselves within the space. **This can take the form of built-in places for personalization**, such as mural walls and ledges for personally identifying items—such as photos, plants, or spiritual artifacts—outside each unit.



Nested Layers

People who have suffered trauma will have varying degrees of sociability and levels of comfort with social interaction. When designing with TID principles, Shopworks recommends using "nested layers" offering occupants a spectrum of choices of spaces in which they interact with a social continuum—**such as forums for large public events complemented by quiet nooks and niches for retreat and relaxation.**



Sensory Boundaries

People who have experienced trauma often have sensory sensitivity—for example, being more attuned to harsh sounds, smells, touch, or light. To counter this and provide a sense of safety, Shopworks recommends using **organic materials, wood, stone, and natural textures correlated with biophilic benefits.** Gentle transitions between indoor and outdoor and public and private spaces are also helpful.



A Resilient Building Builds Resilience

Timber stands the test of time in the firm's design of The Warren Residences, an adaptive reuse of a historic United Methodist Church built in 1909. Operated by St. Francis Center, it consists of 48 studio-style affordable supportive apartments for individuals who have experienced homelessness. The innovative renovation of the century-old heavy timber building demonstrates the resilience of wood as a building material while giving occupants a warm, spacious, light-filled interior that helps it meet the supportive trauma-informed design principles.



"When practicing TID, there's no replacement for carefully listening to future occupants to understand their experiences first-hand. Many of us have never experienced homelessness, incarceration, or other traumatic events that can all have a big impact on how someone processes the space around them. It's vital for architects to understand that the decisions we make, the products we specify, and the spaces we design can have either a really positive or negative impact on people managing past trauma," Holtzinger says.



Laurel House

Location Grand Junction, Colorado Typology Supportive affordable housing Status Completed 2021 Wood Systems Light-frame wood, mass timber, glulam, Douglas-fir ceiling Size 21,000 square feet Photo Credit Matthew Staver Photography

This TID-informed affordable housing complex provides 34 units to young adults (18 to 24 years old) experiencing homelessness in the Grand Junction, Colorado, area. The apartments are fully furnished and include their own kitchen and bathroom. The facility offers access to mental health services and supports residents in finding jobs at local businesses. Laurel House also provides help with school enrollment, substance use disorders, and life-skills training.

Along with much-needed housing, the facility also has 3,000 square feet of common areas for communal cooking, art on display, and community gatherings. Generous glazing overlooks a 30,000-squarefoot outdoor space that includes a green space, patio, play area, and recreational amenities.

The complex is built using a combination of <u>light-frame wood</u> <u>construction</u>, mass timber, and softwood ceilings and soffits.





A core feature of its design is a cathedral-style roof constructed with structural insulated wood panels – made of Douglas fir – supported by glulam columns and beams. The double-height loft space provides a central common area and boasts ample sunlight and benefits from the warmth of exposed wood ceilings, beams, and finishes.

Exposed wood is complemented by an earth-tone color palette of other natural materials. The facility's exterior siding is based on the colors of the adjacent Colorado National Monument and was detailed to mimic the appearance of eroded sandstone.

A wood column shaped to look like an abstracted tree trunk conjures images of a tree house — a safe and playful home away from home.

Examples of TID principles brought to bear in the space include nested layers of spaces such as built-in nooks, indoor terraces and niches for solitary activities, and alcoved spaces with visibility, allowing occupants to easily survey opportunities for social interaction. Built-in shelving customized to the occupant (e.g. entrances to private spaces marked by photos, mementos, or personal keepsakes), collective art displays and chalkboards for messages serve as "identity anchors," making the space less institutional, more welcoming, and intimate. Wood is used throughout as a material for warmth, acoustic, olfactory, and tactile qualities. Slanted and dropped wood ceiling details bring the scale of the room down to feel more like a tree house or A-frame cabin.











PATH Providence at the Heights

Location Aurora, Colorado Typology Supportive affordable housing for individuals recently released from incarceration Status Completed 2020 Wood Systems Light-frame wood, mass timber, CLT Size 44,000 square feet Photo Credit Matthew Staver Photography

Providence at the Heights is an apartment complex in Aurora, Colorado, run by Second Chance Center with 50 one- and twobedroom supportive housing apartments. The light-frame and mass timber building is designed to support individuals recently released from incarceration—many of whom are chronically homeless, challenged with a disability, or earn 0-30% of the area median income (AMI). Along with the apartment units, the complex includes a ground-level amenity area including gathering areas, a courtyard, and other flexible spaces for programming needs.

Shopwork's design solution for the project came out of the client's core values of safety, healing, stability, transparency, community, and the worth and dignity of all people.

Before visitors and residents enter the building, they're greeted by an inviting green space and the warmth of wood—with mass timber, exposed on both the exterior and interior, making up the building's primary first-floor structure—complemented by two additional floors of light-frame wood construction. Unique to the project is its expansive use of exposed <u>cross-laminated timber (CLT)</u> as walls, posts, and ceiling details for the main floor and lobby space. Once inside, natural wood grain and an abundance of sunlight envelop occupants. Large windows and doors create a visually stunning indoor/outdoor connected amenity space. Exterior garden spaces also featured western red cedar fencing and privacy screens.

"PATH was a really successful project and we've received great feedback. Using CLT was pretty new and innovative for this type of building. The exposed timber creates a warm, welcoming, authentic feel—inside and out—blending the indoor and outdoor experience," Holtzinger says.

As part of the firm's commitment to TID, the project team solicited extensive post-occupancy feedback. The results showed the shared dining room/kitchen amenity area at PATH is highly valued for its spaciousness and usefulness for a variety of activities, including bingo, art shows, and building-wide meals. The outdoor patio is also a popular spot, with grills, a gazebo, and a fire pit facilitating socializing and recreation, cementing connections between residents and staff.

"The project's use of wood and natural materials, along with the warm fireplace hearth, is very intentional—and quite the opposite of what you might expect from any environment used for incarceration," Holtzinger says.







PATH





The Elisabetta & The Stella

Location Denver

Typology Supportive affordable housing for people with intellectual and developmental disabilities Status Completed 2022 Size The Elisabetta: 106,000 square feet The Stella: 181,000 square feet Wood Systems + Species Light-frame wood, mass timber, CLT, western red cedar

Photo Credit Matthew Staver Photography

The Elisabetta and The Stella apartments are mixed-use residential buildings in Denver's Globeville neighborhood designed to provide affordable supportive housing to children and adults facing intellectual and developmental challenges. Research suggests that people facing such challenges are exposed to trauma at a higher rate than their non-disabled peers, making them a good fit for TID. Both facilities were built using a combination of light-frame wood and mass timber construction. The projects are made possible through a partnership between Gorman & Company Property Management and Lardon—a longstanding, well-respected Colorado-based non-profit organization focused on education, employment and community living services to support this population.





The Elisabetta

The Elisabetta is a four-story wood building featuring 91 one-, two-, and three-bedroom apartment units serving individuals at or below 60% AMI—with 22 reserved for people with disabilities. Along with affordable units, the complex features a fitness room, community spaces, bike storage, and outdoor courtyards. The first floor common spaces feature exposed CLT ceilings, posts, and beams, complemented by textured wall coverings; built-in wood alcoves; wooden furniture, floors and cabinetry; decorative drop-ceiling wood panels; and large-scale murals by local artists.



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The Stella

The Stella is also a four-story wood building, and it features 132 one-, two-, three-, and four-bedroom apartment units, all serving people at or below 80% AMI. The building includes leasing offices, an outdoor courtyard with a play structure and covered patio, and indoor amenity space also featuring works by local artists.

Upon entering the building's double height lobby—similarly featuring exposed CLT built-ins, posts, and beams—occupants are greeted by a large-scale mural as they ascend a metal staircase with stringers also constructed with CLT.

Central to the project's lobby is an indoor two-story geometric feature wall clad in a striking hexagon pattern of western red cedar. Apartments also feature ample use of natural wood flooring, cabinetry, and furniture.

And both these innovative housing projects showcase trauma-informed design best practices throughout, carefully designed to give residents a sense of community and connection while still accommodating the need for safety and retreat.











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