

TRAUMA-INFORMED DESIGN FOR HOMELESS POPULATIONS



“The design of a physical space influences the mental state of the people in that space. That shapes their attitudes and behavior.”

SALLY AUGUSTIN, “PLACE ADVANTAGE, APPLIED PSYCHOLOGY FOR INTERIOR ARCHITECTS”

Note: The authors realize the language surrounding homelessness is evolving. While we respect that many people now prefer the terms “unhoused” or “houseless,” we found it difficult not to use homeless or homelessness in certain instances. Those terms remain the official language of government and the terms most commonly associated with shelters. We hope language does not distract from the larger goal of this document, which is to provide safe and uplifting spaces for people who need it most.

The purpose of this document is to provide homeless shelters and other social service providers with design strategies that create a safe, healing and welcoming environment for vulnerable populations and the people who serve them.

Historically, little attention has been paid to how design can reduce trauma and instill resiliency in people battling homelessness and behavioral health challenges. Fortunately, that is beginning to change as more people understand the role our environments play in impacting health and wellbeing. This document builds on that understanding by providing tactical design solutions we hope organizations can use to improve the lives of people who are often overlooked.

The recommendations offered in this document are for renovations and/or new construction and draw on existing research examining the way design influences human behavior. These design guidelines also include insights from interviews with multiple social service providers in the U.S. and Canada (contributors listed on page 44). Such organizations often have limited resources, and the design solutions provided in these pages can—and should—be scaled to meet required budgets.

In all cases, we recommend that those using this document to engage with professionals who understand local code requirements.

Sincerely,

Pam Light

Deborah Sperry

Lori Selcer

Kay Sargent



Visual access to space is important. The addition of glass walls give people a sense of security within the environment. The use of natural materials, such as wood, can add warmth to a space.

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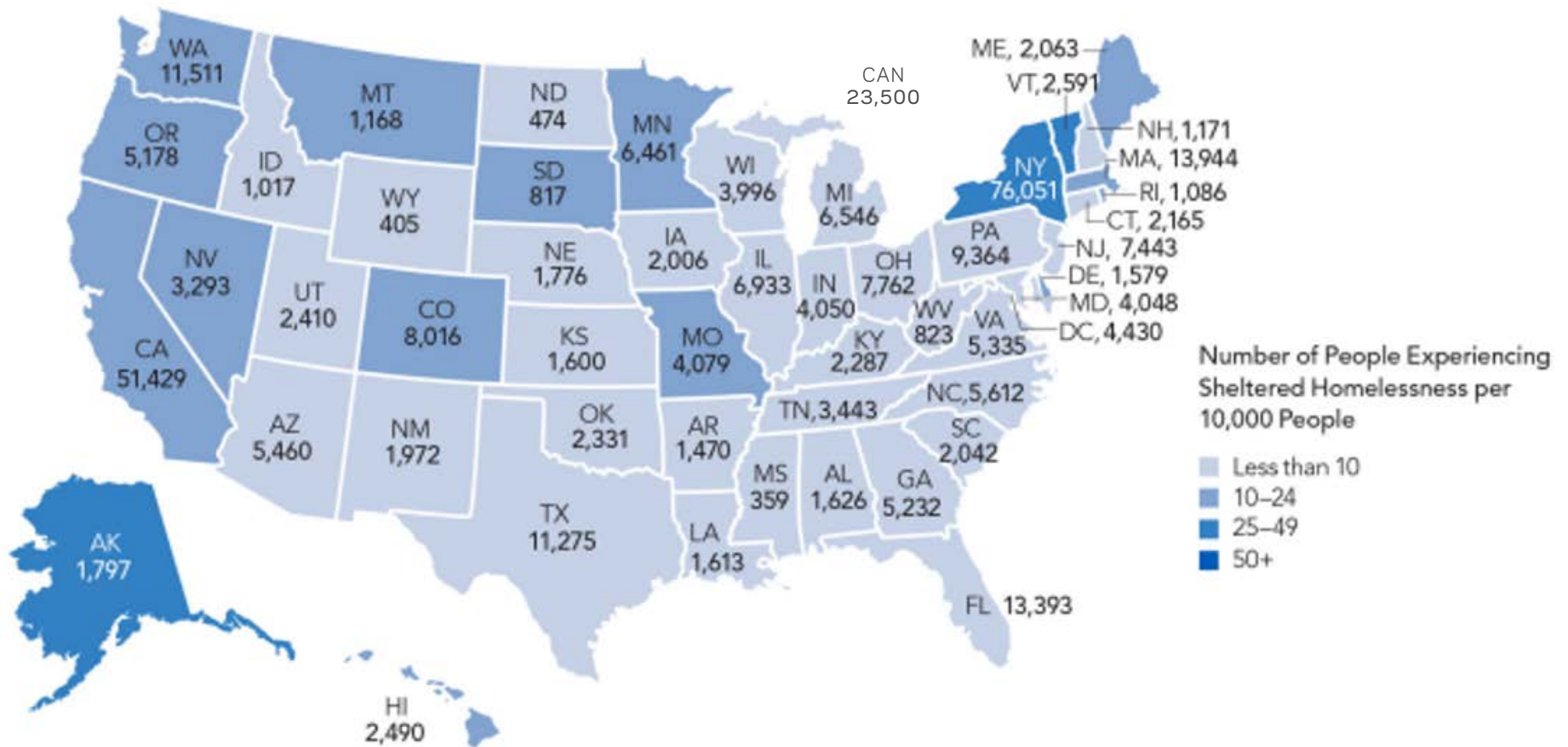
PEOPLE EXPERIENCING HOMELESSNESS

Homelessness is a widespread social concern in North America and many other developed countries.

More than **581,000** people in the U.S. and **235,000** people in Canada experienced homelessness in 2022.

This map denotes areas in the United States with the highest level of homelessness and the estimated counts of unhoused people.

By State, 2021



Reference information:
HUD 2021 Annual Homeless Assessment (USA)
Homeless Hub (Canada)

CLIENT NEEDS & DESIGN CONSIDERATIONS

CLIENT PROFILE TYPES

Homelessness was increasing across much of North America before the coronavirus pandemic.¹ It has only grown worse since then. Layoffs coupled with steep price increases (particularly within the housing sector) have created a double whammy for homelessness service providers.²

Faced with increased demand, homelessness agencies and other shelters must make efficient use of limited space. This can be particularly challenging when dealing with vastly different client needs. Although no two clients have the exact same challenges, it's important to understand how homeless population demographics can shape facility and design requirements. This document addresses the following unhoused populations:

Veterans

Former military often have lasting physical and mental health needs stemming from conflict and battle. Wheelchair accessibility and calming spaces (that counteract PTSD and other mental health issues) are just a couple of the design considerations for facilities that serve veterans.

Victims of Domestic Violence & Trafficking

It is estimated that 80 percent of mothers and children experiencing homelessness have experienced domestic violence.³ People who've been trafficked and exploited for sex and labor also face increased housing insecurity. For these victims of homelessness, facility design should provide a sense of privacy and safety, particularly within co-ed facilities. Ideally these facilities can cater to the play needs of children and offer spaces for families to stay together. Consider, too, how a facility name—particularly one that strongly suggests it is a homeless shelter—could scare off individuals who need the services but do not want to be associated with a shelter.

Addiction & Substance Abuse

While people experiencing homelessness are often unfairly classified as substance abusers, shelters must account for some clients having alcohol and drug addictions. Facility design that allows staff to safely and efficiently intake clients and their belongings and eliminate hiding spots for contraband can go a long way to ensuring a safe environment for all.

Individuals with Mental Illness

As many as one-third of unhoused individuals suffer from mental illness.⁴ At the same time, we know that homelessness itself is a cause of mental illness, trauma and increased morbidity.⁵ With mental illness playing such a large role in homelessness, spaces designed to serve this population should be as soothing as possible and speak to a diversity of needs. For example, some people experiencing a mental health episodes may not be able to sleep around other people in a dorm setting. Having smaller crisis dorms or dorms of different sizes could help accommodate these individuals.

¹ The U.S. Department of Housing and Urban Development, "The 2020 Annual Homeless Assessment Report (AHAR) to Congress"

² The United Way of the National Capital Area, "The Impact of the Covid-19 Pandemic on Homelessness in the United States"

³ Institute for Children, Poverty & Homelessness, "The Intimate Relationship Between Domestic Violence and Homelessness"

⁴ Mental Illness Policy Organization <https://mentalillnesspolicy.org/about.html>

⁵ Psychiatric Times, "The Never-Ending Loop: Homelessness, Psychiatric Disorder, and Mortality"

CLIENT PROFILE TYPES CONT.

Chronically Homeless Individuals

In 2020, 27 percent of individuals experiencing homelessness in the U.S. had chronic patterns of homelessness, defined as being continuously homeless for 12 months or at least four times in the past three years for a period adding up to 12 months.⁶ These individuals can benefit from design that instills a sense of place, respect and ownership with the goal of encouraging the person to utilize the care and services a shelter provides. Ideally shelters serving this population can provide access to computers, WiFi and mailboxes to help people in their search for housing and/or work opportunities.

Families and Children

While individual adult men account for the largest percentage of homeless populations in the U.S. and Canada⁷, they do not suffer alone. Families and children require specialized spaces that accommodate needs that are often different from the main population.

Seniors

Elderly populations also have different needs than the general population. Organizations that care for seniors must pay particular attention to design issues around accessibility, mobility, acoustics and lighting, all of which can be impediments to service for older clients.

Financial Need

Financial strain itself can often result in homelessness. This can affect people of all ages, race and physical health. Research has shown that financial crisis can result in one of the strongest factors associated with lifetime experience of homelessness in young adults. It is important to address those in need early to avoid damaging stigma, mental fatigue and prevent negative stimulus.

⁶ HUD, "The 2020 Annual Homeless Assessment..."
⁷ Canadian Observatory on Homelessness; HUD



CLIENT AND STAFF NEEDS & DESIGN CONSIDERATIONS

The best shelters align the needs of clients with the needs of staff. Often these needs can be harmonious. Regardless of who we are, we all want environments where we feel safe, secure and comfortable. Everyone also wants a place that is healthy and clean and allows us to be our best selves.

Safe & Secure Environments

The very definition of shelter is “to provide protection,” so it’s inherent that our shelters emphasize safety and security. Simple design solutions to promote safety and security include good visibility (clutter-free spaces that allow people to see people and things around them), places for guests to securely store personal possessions and proper lighting to illuminate those same spaces at night. Visible security, either in the form of personnel or door systems and video cameras, can also help people feel safe within an environment.

Privacy

Private spaces are important for providing clients with places to discuss their challenges one-on-one with case managers. These same rooms can provide areas for quiet moments to de-stress and plan. Though many shelters lack the space or resources for individual bedrooms and bathrooms, these room types can be particularly beneficial in serving families, women and victims of crime and violence, and people experiencing mental health crises.

Treatment and Learning

Design can be used to aid treatment and educate and inspire clients. This can include providing the space and resources, such as computers and classrooms, to help prepare clients on their path to housing and independence. Or it could be simply celebrating the steps they make along the way. One shelter we examined while developing this document features a large tree mural in a central space within the building. When clients reach new milestones, such as finding a job or permanent housing, they get to decorate the mural with a leaf recognizing their achievement. The mural has inspired other clients to take advantage of the shelter’s case management services.

Comfort + Emotional Support

People won’t take advantage of a shelter if they don’t feel comfortable within the space. People who are comfortable and removed from the fight-or-flight survival mode of homelessness are also more receptive to treatment. Shelters can instill a sense of comfort in ways that stretch beyond soft furnishings and warm aesthetics. Providing people with a choice of space types—from group to individual and quiet to social—helps place people at ease. Wayfinding also supports comfort by providing people with intuitive layouts and signs that make a space more inviting and relatable. Clean, neat spaces and pleasant scents also can make a space more welcoming with little expenditure.

Health & Well-Being

Everyone needs access to clean air, light, exercise and nutrition to support both their physical and mental health. Shelters should consider how, if possible, they can provide operable windows, places for movement, connections to nature and healthy food choices to clients. Where actual access to nature is not possible, “virtual” access can be provided through art and imagery, pattern and color. One of the shelters we reviewed for this document operates a highly successful and popular community garden on its property. Clients grow their own fruits and vegetables, which not only provides them with nourishing food but also gives them a sense of pride and connections to sunlight, nature and physical activity.

Daylight

Daylight promotes health in numerous ways that can benefit both clients and staff. Daylight helps regulate our circadian rhythms — the physical, mental and behavioral cues that help regulate our 24-hour biological clocks. Our circadian rhythms influence our sleep and wakefulness cycles and other important health factors such as hormone release, hunger and digestion and body temperature. In addition to aiding our circadian rhythms, natural light and views of nature are also known to alleviate stress and help the body recover.

STAFF NEEDS & DESIGN CONSIDERATIONS

SPECIFIC STAFF NEEDS AND DESIGN CONSIDERATIONS

Respite Areas

Caring for people who are experiencing homelessness can be both emotionally and physically draining. When possible, staff should have a place unto themselves where they can unwind, eat, socialize and discuss issues in private. Such spaces might include plants, artwork, soft lighting and window views that provide a relief from the reminders of work.

Pro tip: Wall colors can also help staff feel calm or energized, depending on the goal. See the “Paint and Color” section of this document.

24/7 Nourishment

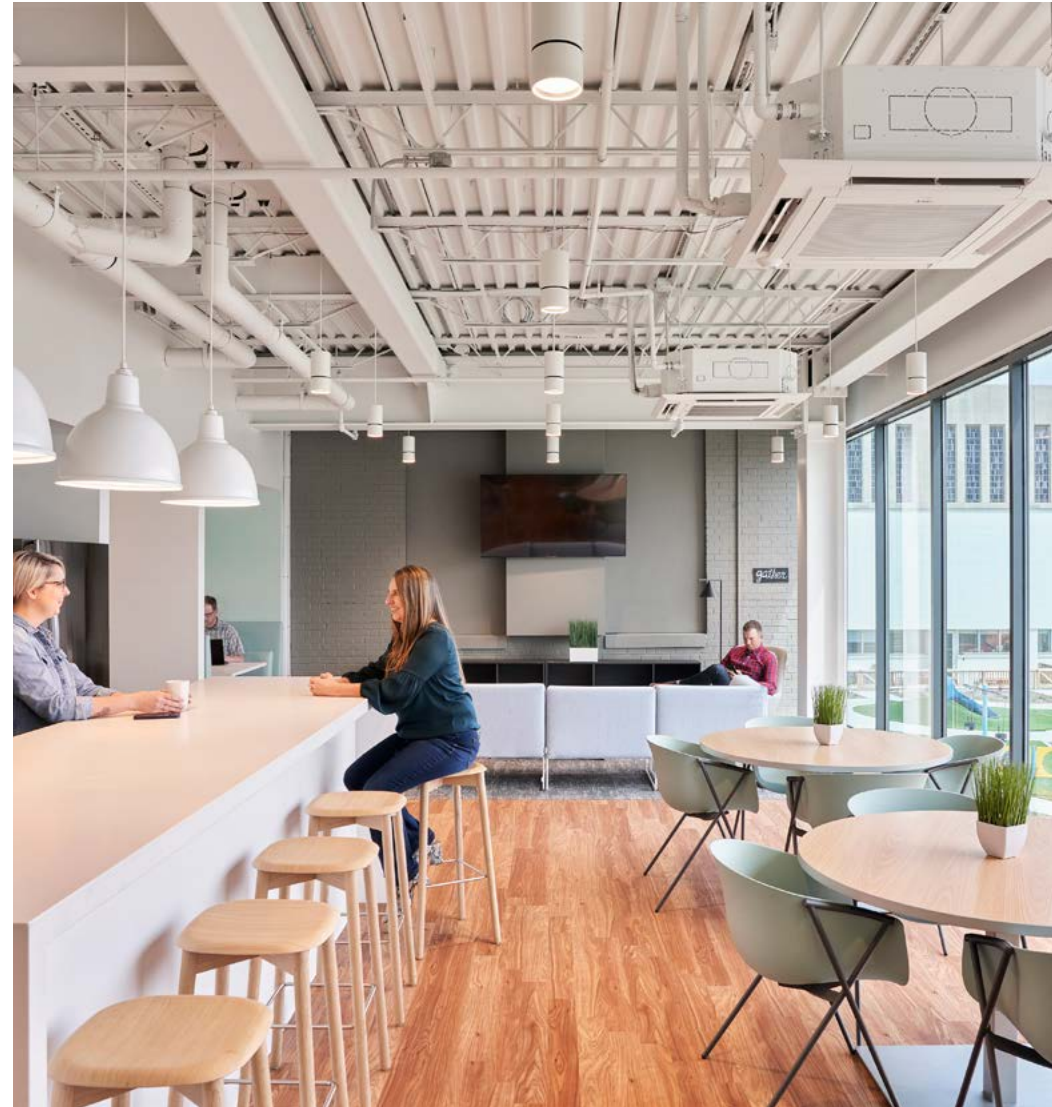
Supervisory and intake staff often work irregular hours—nights and weekends—when access to healthy food options are limited. Design that offers and encourages staff to eat and drink properly helps people perform at their best and helps to retain staff.

Adequate Workspace

Many shelters were never built to serve as housing or workplaces. As such, shelter employees are accustomed to sharing desks and working in tight, makeshift spaces. Yet balancing public spaces within the shelter with work and office spaces can benefit both staff and clients. With adequate workspaces, employees are able to do perform their jobs better. Their clients, in turn, receive better care and support.

Private Bathrooms

When possible, shelters should consider private bathrooms for staff. The benefits of separate lavatories are twofold. They provide staff with privacy and a place for momentary respite. Clients also appreciate dedicated restrooms that provide them a sense of privacy and autonomy.



Social and re-fuel areas are important to well-being. Locating these spaces in areas with outdoor views and access to natural light helps to create a relaxing, calming atmosphere.

TRAUMA-INFORMED DESIGN STRATEGIES

TRAUMA-INFORMED DESIGN STRATEGIES

The following pages discuss design concepts and strategies that can be used to improve spaces for serving vulnerable populations. It's important to note that not all the guidelines presented here will apply to your specific project or design needs. Shelters and service agencies operating in older buildings that require renovation, for example, will likely have more difficulty implementing design changes than those operating in new buildings or buildings under development. Municipal codes may come into play and require rethinking or compromise of the design recommendations presented here. For this reason, we recommend always consulting with a local professional designer before undergoing a significant building alteration.

Collectively, we hope the information provided within this section can help organizations better understand the fundamentals of design and how they can aid in the treatment and therapy of those experiencing various traumas, including homelessness.*

*This paper makes no representations or warranties that a project, design or products will provide any specific therapeutic or psychiatric redress for those experiencing various trauma. We recommend that in addition to consulting with a design professional, an organization contemporaneously consult with its staff and licensed and trained professionals who specifically provide services for the treatment and therapy of those experiencing various traumas to provide advice, recommendations and information.



Visual cues and wall graphics can add interest to space. Choosing the appropriate furniture for each setting is important. Light weight furniture that is easily moved provides users flexibility to orient as needed.

PLANNING

Planning, including programming and layout, takes a holistic look at the entirety of a building. Does the building have the capacity and infrastructure to function as intended? Is it laid out in an intuitive way? Are individual spaces properly furnished and equipped to meet specific goals?

These questions often are answered during the programming stage of design when designers vet and explore the facility needs of an organization. When it comes to programming for homelessness agencies, input from clients and staff is crucial. Organizations that have experienced success in facility planning often share the following planning elements across their core service areas.

Entryways

The old adage is true. First impressions are everything. Foyers, lobbies and exterior entryways, such as a driveways or porches, are often the first introduction people have to an organization. If the entryway of your facility isn't making a good first impression, here a few design fundamentals you may want to consider:

- **Transparency:** Glass doors and windows at the entrance offer two advantages: They allow for calming, natural light to enter a building. They provide a sense of transparency. Visitors and passersby can see what is happening inside before entering. This is critically important for reaching people who may be anxious or intimidated about seeking help.
- **Lighting:** If natural light is not an option at entrance, organizations should consider warm lighting that fosters a sense of comfort and relaxation. Lighting also offers a sense of security. Entries should be well illuminated at night.

Pro tip: Soft white light bulbs have a warm, candle-like glow while lamps labeled cool white or daylight cast a more bluish tint.

- **Comfort & Security:** Guests will often queue at entry prior to opening hours. Ideally, shelters can provide an entrance with enough space to accommodate waiting guests and covered areas to protect from inclement weather and intense sun. Visible security (alarm systems, locks, security system placards) at entrance can also help guests feel safe and secure when visiting for a first time.
- **Signage:** Clear signage and wayfinding at entry also can help to put clients at ease by providing them an immediate understanding of where they are and intuitive guidance to other parts of the building.

- **Access to restrooms:** Shelter guests often have a single immediate need upon arrival. Easy-to-find restrooms can quickly make a shelter feel accommodating and welcoming. Restrooms located near arrival and visible by reception and security can quickly make a shelter feel accommodating and safe.
- **Warm accent colors:** Oranges, yellows and reds—when used sparingly—can evoke feelings of happiness and optimism and create warm energy upon entry to a facility. (A more in-depth discussion on color theory can be found in the Paint & Color section.)

Reception

Once people have entered a building, reception design can help immediately make them feel comfortable and special.

- **Welcoming reception:** Rare is the shelter that could be mistaken for a boutique hotel. Yet there are lessons shelters can learn from the hospitality industry, especially when it comes to reception. Shelters like the Salvation Army Center of Hope in Nashville have reimaged their reception to be more like a hotel concierge. Instead of a typical reception desk awash in reference materials and literature, the clean and clutter-free concierge reception offers clients more personalized answers and suggestions. The Salvation Army has found that clients and visitors respond better to this type of reception.
- **Comfortable and safe seating:** While waiting for an appointment, are people provided space that places them at ease? The best reception spaces share a few common traits: They're clean. They're well lighted. They offer comfortable seating that allows for distancing and access to amenities like bathrooms, water fountains, and outlets or USB connections for phone charging.

Pro tip: People experiencing trauma often feel constantly on guard. Seating in reception areas should be placed with backs against a wall to put guests at ease and eliminate the fear of someone sneaking up from behind.

- **Meeting rooms:** Meeting rooms adjacent to reception offer clients quick access to service. Design for these spaces should consider privacy (visual and aural), aesthetics (lighting and décor) and comfort (furniture and, if possible, a separately controlled thermostat.) Ideally these spaces should also be secure, with door locks and duress buttons.

PLANNING

Shared Spaces and Sleeping Rooms

Dorms and shared spaces can be some of the trickiest spaces to program due to the challenges of balancing privacy and comfort with safety and security. As mentioned earlier, ideally shelters can provide clients with multiple sleeping choices (from large, to small to private) based on their needs. Regardless of size, a few design principles apply to all these rooms. They should contain space for people to store personal belongings, hard floors to simplify cleaning, and plenty of outlets for those who require CPAP machines for sleeping. Adjustable lighting, natural light and soothing color palettes, such as pale blues and greens, are also beneficial. Bed-bug-resistant furniture and mattresses (or mattress pads) are also highly recommended.

Hydration Area/ Kitchen

Guests often arrive tired and hungry. Ideally shelters can place an area near reception where people can access beverages, such as water and coffee, and light snacks. These spaces can include a sink, dishwasher, fridge, microwave, storage for dishes/cutlery and waste receptacles.

Staff Lounge

A staff lounge away from active intake areas offer a necessary and welcomed reprieve for employees. Such spaces should include doors for privacy and, if possible, comfortable seating, adjustable lighting and access to natural light.

Quiet Area

Shelters may want to consider a room for people experiencing moments of extreme stress and instability. Such spaces should help calm the person with features such as dimmable lighting and door and window treatments for privacy.

Intake Areas

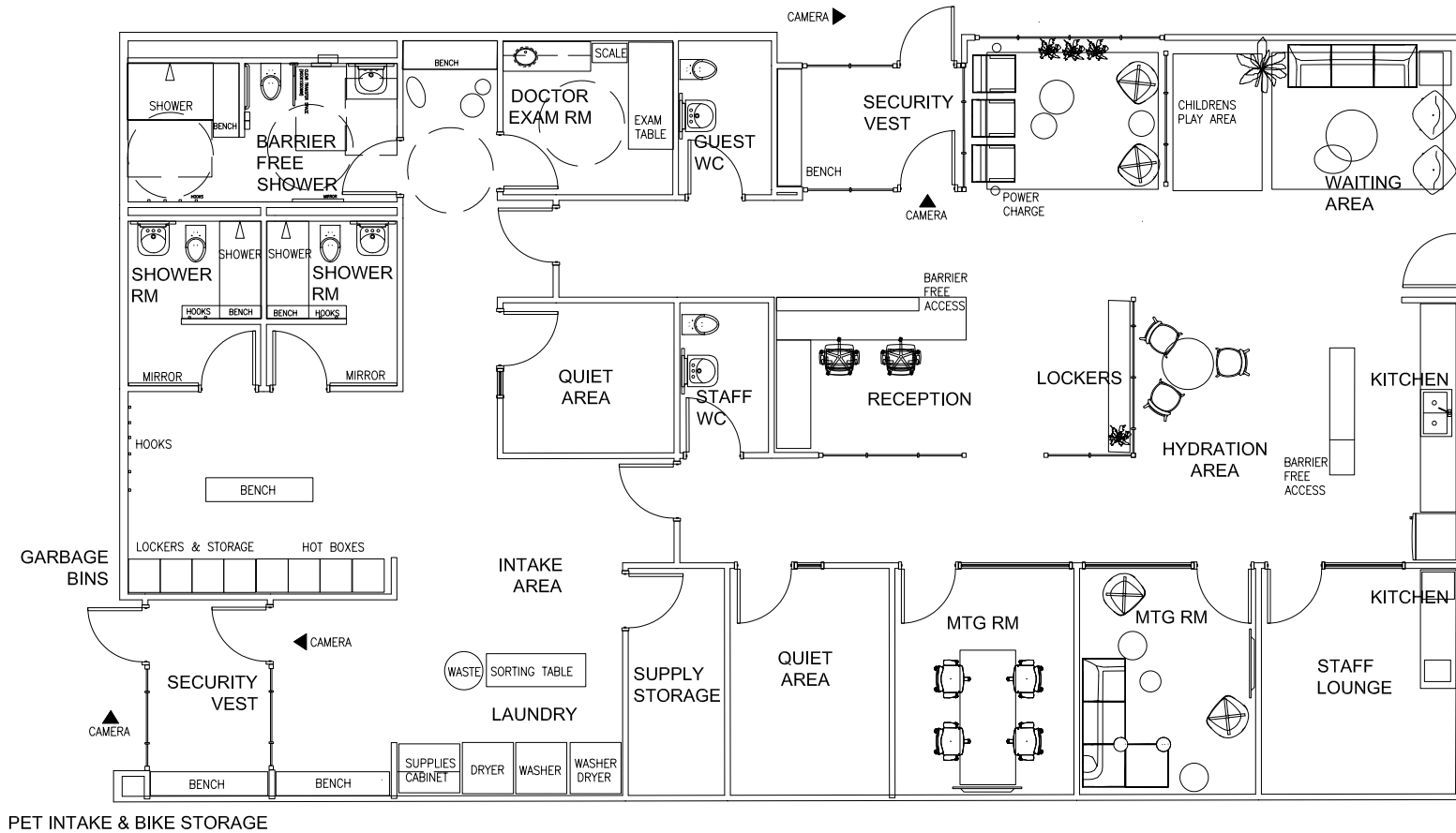
Secondary building entrances can make ideal spots to locate intake areas. Here clients can arrive with their belongings and begin the onboarding process. Intake areas should include security checkpoints and access to seating and surfaces to place personal items. Locating washrooms (with showers), hot boxes, laundry facilities and lockers and storage near intake can help streamline the onboarding process. This area should be brightly lit, signage clearly visible and sight lines determined. Access to pet kennels, bike storage and waste receptacles near intake are additional considerations.



Orange is an energy color. It makes a room feel warm and active. The deeper the shade, the more appealing the color.

Pro tip: Too much color in a room can be overwhelming. Consider using a bold color on just one wall as a contrast to more neutral colors used elsewhere in the room.

INTAKE SHELTER PLAN EXAMPLE



This floor plate for a single-gender shelter includes a reception area with clear sightlines to the waiting area and secure main entrance. A separate secure entrance allows access to laundry and storage facilities during client intake.

INTAKE SHELTER PLAN EXAMPLE



An isometric view of the floor plan helps to understand the volume of various spaces, the visual access between areas, and traffic corridors that allow shelter guests multiple exit routes.

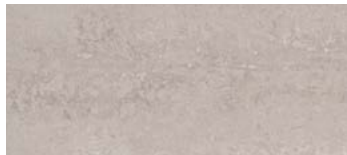
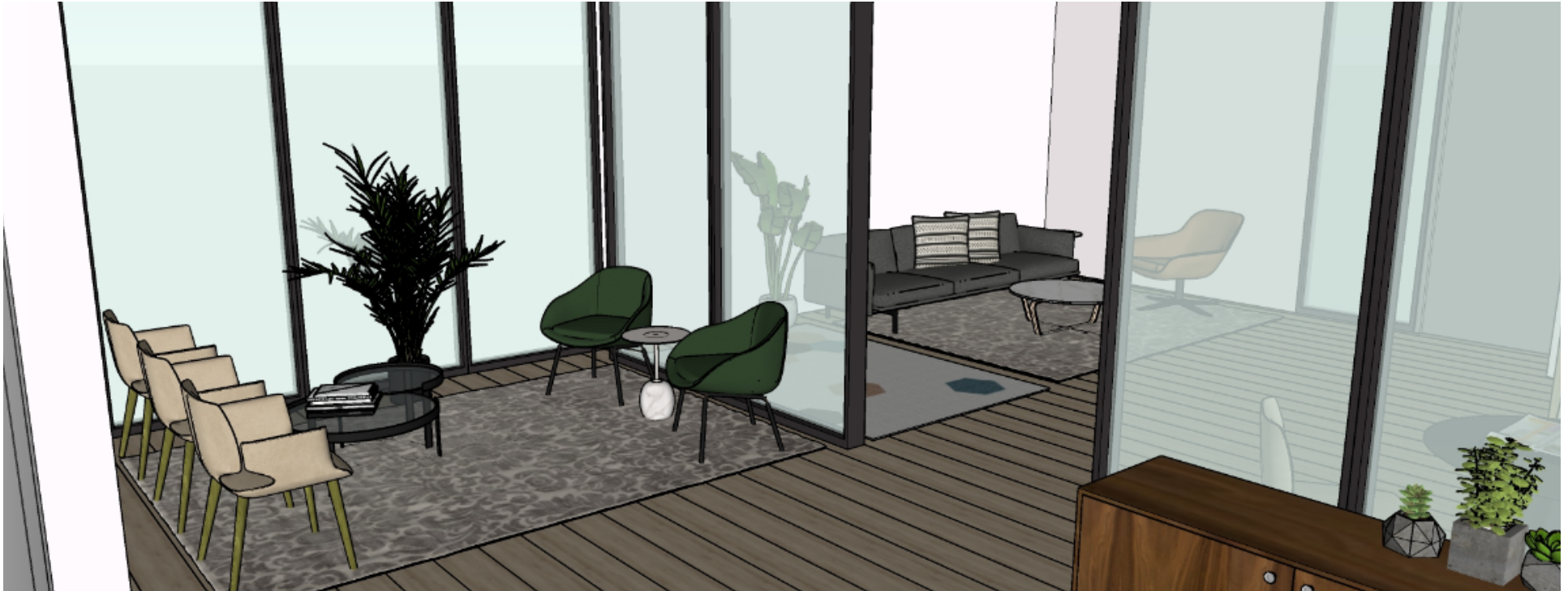


Reception concierge should have full visual access to people entering the building as well as guests within the waiting area.



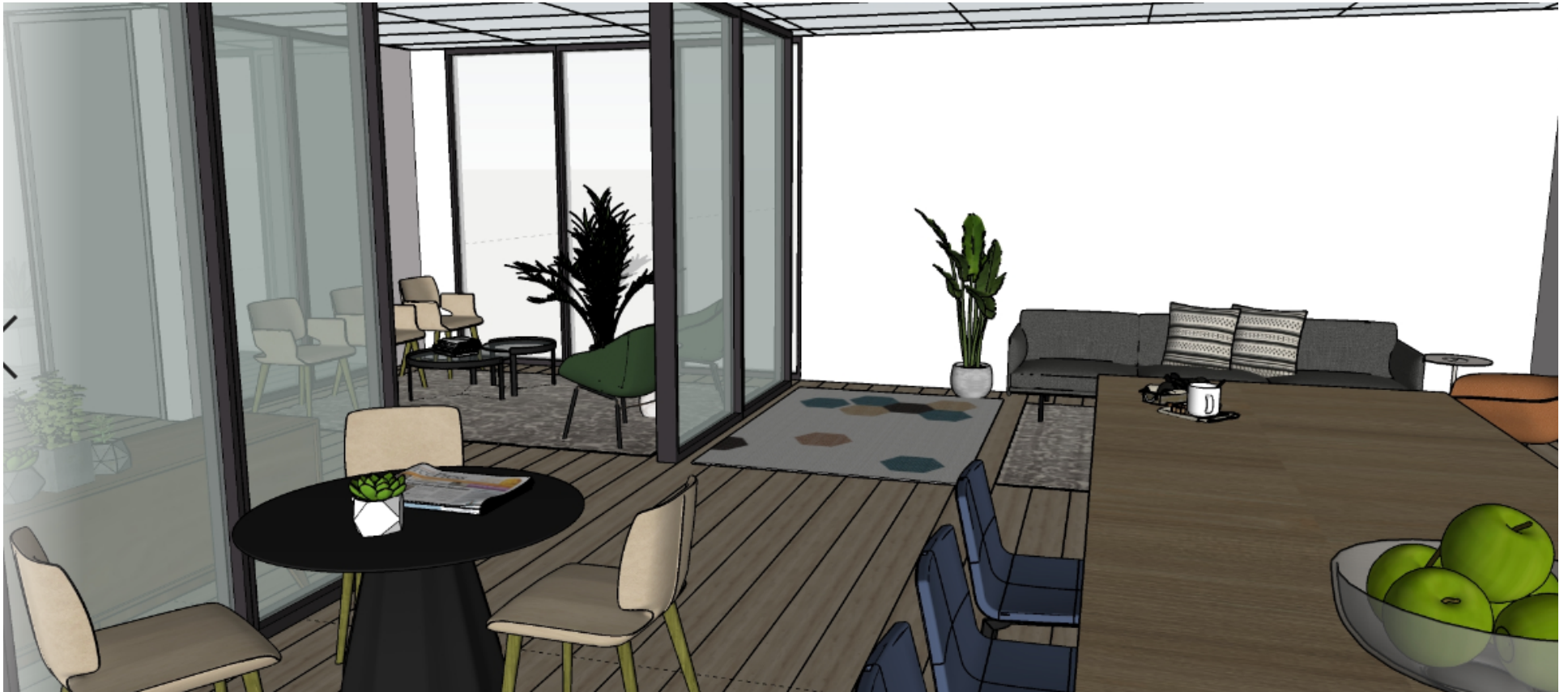
Individual seating within the waiting area is preferred, situated so no one has their back to traffic corridors. Power outlets for guests to charge their phones should be considered.

INTAKE SHELTER RECEPTION WAITING AREA



Bright, open areas allow visual transparency between spaces and make guests comfortable. Furniture should be comfortable and easy to clean. Consider a children's play area within a separate family waiting area.

INTAKE SHELTER WAITING AREA



If possible, place the reception area where natural light can enter the space. If the space is visible to public areas, a film or glazing can be added to the windows for privacy.

INTAKE SHELTER HYDRATION AREA



Consider placing a hydration area with coffee, teas, juices and soft drinks close to reception. Guests should feel welcome to grab a beverage while waiting. A standing height island within the kitchen area provides a place for casual interactions. Table and chairs allow guests an optional seating area to enjoy their refreshment while waiting.

INTAKE SHELTER PRIVATE CLIENT ENTRANCE



This intake area provides guests a place to store their belongings, have access to laundry and shower facilities, as well as medical services. Consider an adjacent building where pets, bikes and carts can be housed.



A counter at the entrance for sorting through personal belongings, along with laundry machines, help to aid in transition to a clean environment.



Lockers to store personal belongings close to the entry area give guests peace of mind that their items are safe.

COMFORT

One of the most important considerations to designing a space is whether it will be comfortable for its occupants. While comfort is subjective (what's comfortable for one person may be uncomfortable for another), the following factors all impact people's sense of pleasure and enjoyment: air temperature and quality, aesthetics, noise, acoustics and sense of safety. For social service agencies, this can be phrased another way: Try to provide a space that looks and feels welcoming—not institutional.

All spaces can benefit from the following comfort factors:

- **Temperature:** It can be difficult to please everyone when it comes to air temperatures. Questions your organization may want to consider: Do room thermostats allow for individual spaces to be heated or cooled to comfortable temperature ranges? In the absence of thermostats, can open windows, fans or portable heating and cooling units moderate temperature ranges? Is the temperature range appropriate for the clientele, such as elderly clients and those who are sick or on medication and often desire warmer spaces?

Pro tip: Generally speaking, it is recommended to keep air temperatures between 68.5 to 75 degrees Fahrenheit in the winter and 75 to 80 Fahrenheit in the summer.⁸

- **Noise and acoustics:** Design can either exacerbate or mitigate sound. Hard materials such as tile, concrete, and metals magnify noise while soft materials such as carpet, plush furniture, fabric wrapped panels, and acoustical ceiling tiles absorb sound. Rooms that need extra focus on acoustics include conference rooms, private offices, intake rooms, phone booths and large meeting areas. Room acoustical control is usually accomplished by slab-to-slab walls (they don't just stop at the acoustical ceiling), and sound boots in HVAC ducts. This stops noise in the room from leaving and noise outside the room from coming in. Insulation and double-paned windows can help dampen outdoor noise.

Pro tip: When planning a new building or renovation, it's important to consider outdoor sources of noise, such as busy roadways or exterior air conditioner units. Interior spaces that need quiet, should be planned away from those exterior noise sources.

- **Clean air:** Clean air is free of mold, chemicals, smoke and other toxins. Ways to improve indoor air quality include changing HVAC filters regularly, opening windows (if windows are operable and outdoor air quality is healthy), using portable air purifiers and stipulating the use of low or zero VOC paints, cleaners and materials within a building.

Few things are as unpleasant as foul and stale odors. Worse still is when offensive odors are masked with cleaning agents or deodorizers that add caustic and noxious fumes to the mix. Simple solutions like opening a door or window and using closed-lid trash receptacles can help eliminate many odors.

Pro tip: Products with a low VOC label contain less volatile organic compounds (industrial solvents such as trichloroethylene) that emit harmful gases and fumes.

- **Access to water and restrooms and laundry:** Your facility should provide guests with access to drinking fountains, water coolers, bottle fillers or other sources of fresh drinking water. Bathrooms should be clean and accessible. Clients with special needs should be able to access water and restrooms without the assistance of others.
- **Safe and secure storage:** People experiencing homelessness often arrive with large amounts of personal possessions. While providing storage space can be problematic for service agencies, it can also go a long way toward making clients feel comfortable and free them up to receive treatment and care. Ideal storage solutions can accommodate more than just clothing and personal effects but also bicycles and, increasingly, pets.

Pro tip: Storage spaces can work best when they're adjacent to laundry rooms and trash and recycling bins, allowing guests to clean and consolidate their belongings. Hot boxes to disinfect clothing are also a nice amenity to offer if possible.



A space with neutral colors that uses texture (such as the baskets and the chairs webbing) help foster relaxation and comfort. Window views and close access to water and restrooms also help put people at ease.

Photo courtesy of HOK, photographer Ben Rahn

⁸ <https://www.cdc.gov/niosh/topics/indoorenv/temperature.html>

PAINT AND COLOR

Paint and color can be one of the easiest and most cost-effective ways to freshen and update a space. Selecting the proper paint and color requires an understanding of how a space is to be used. Is it a low- or high-traffic area? What mood should the space evoke? Will it be used for social or group purposes or is it intended for quieter, more reflective uses?

Before we talk color, let's start with a brief overview of paint.

Types of Paint

Though color is often the first thing people consider when choosing a paint, it's also important to know the types of paints available and their best use. Interior wall paints typically come in four varieties, each of which have their pros and cons.

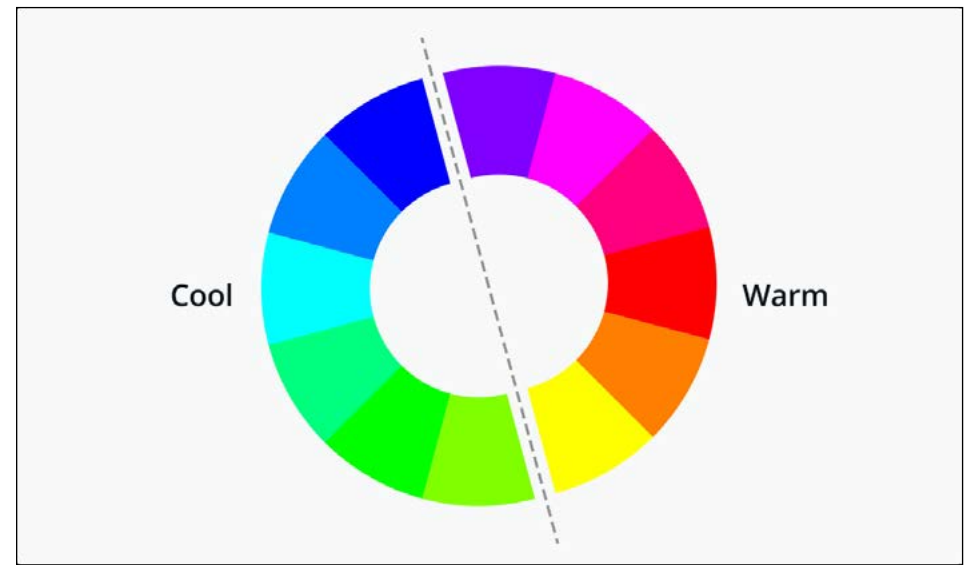
- **Flat / Matte:** As their names suggest, these paints have very little shine. The dullness of these paints makes them good for covering walls with a lot of imperfections. Flat and matte paints will also generally cover more square footage per gallon than the other paints listed here. A drawback, though, is that walls painted with flat and matte paints cannot be cleaned as easily as walls painted with shinier paint types. For this reason, flat and matte paints are best used for low-traffic rooms and ceilings.
- **Eggshell:** This popular paint type has a slight sheen that makes it more durable and easier to clean than flat and matte paints. Like those paint types, eggshell is also good at concealing imperfections like cracks and nail holes. Eggshell paints can be great for medium/high-traffic spaces such as meeting rooms, offices and reception.
- **Semi-gloss:** This visibly shiny paint is mildew-resistant, which makes it popular for painting damp or humid spaces like bathrooms, kitchens and basements. Semi-glosses are good for painting doors and trim because of their ease of cleaning. Drawbacks of semi-glosses, however, are that they can be quite reflective (especially when covering an entire wall) and their high sheen accentuates imperfections beneath the paint.
- **High-gloss:** This paint has the greatest sheen of all. It is extremely durable and washable making it a good choice for high-touch woodwork like doors, cabinets, window and wall trim. Due to the high shine of this paint, it should not be used to cover walls as it will reflect sun and ceiling lights and highlight any existing wall blemishes.

Pro tip: No matter what type of paint you choose, ask for paints that have low or zero VOC (volatile organic compounds). While this may have some impact in reducing paint odor, it will provide healthier indoor air quality.

Understanding Colors:

Though you may not realize it, color and mood are closely associated. Colors can make us energized or relaxed. They can make us happy or sad. When choosing a color, it's important to again consider how the space is to be used. Do you want a space that evokes energy or one that evokes calm or something in-between?

Before we examine how specific colors impact our emotions, let's first look at how colors are classified. Many of us can recall the primary colors we were taught in elementary school. These colors—red, yellow and blue—are the basis for all other colors save for black and white. When we mix the primary colors we get secondary colors of purple, orange and green. Mix those secondary colors with primary colors and we get tertiary colors like orange, violet, rose, azure, chartreuse and spring green. Together these colors form the basis of the color wheel.



PAINT AND COLOR

Warm and cool colors: The color wheel can be divided into warm and cool colors. Warm colors like red, orange, yellow and purple evoke feelings of optimism, energy and joy. On the flip side, they can also signal danger and create feelings of anxiety. Cool colors like blues and greens can help people feel calm and relaxed. They also can make people feel sad.

Hues and colors not on the color wheel can also stir emotions. Black and dark grey, for example, can evoke feelings of sadness and despair. Pastels like pink or lilac, meanwhile, tend to lift people's moods.

Pro tip: It's important to balance both warm and cool colors with neutral colors such as light greys, off whites or beiges. This is particularly true with bright colors. We recommend painting just one wall in a bright color and the rest of the walls with a complementary neutral tone. If you are going to use bright colors, we suggest limiting the extent to perhaps just one wall, and the rest with a complementary neutral tone.

Another way to incorporate bright color is with furniture, upholstery and artwork.

Healing colors: People have used color for centuries to promote healing. Healing colors can help calm the nervous system and make environments more comfortable and restorative. Here's a look at how colors can promote healing.

- **RED:** Red is a warm and stimulating color that creates energy and induces vitality. Red can help alleviate depression and stimulate appetite. Too much red can also create negative outcomes in some people as it has been shown to elevate blood-pressure and increase adrenaline. Before painting a room red, consider its use and use it in moderation.
- **ORANGE:** Orange is an energizing color that radiates warmth and happiness. Unlike its base colors—red and yellow—orange is generally a safe bet for adding cheer to a room and can be used in greater quantities than its core components. Because of its healing properties, orange is one of the best colors for hospitals and particularly children's rooms.
- **YELLOW:** Often associated with the sun, yellow is bright and warm color that evokes feelings of joy. Yellow stimulates intelligence and inspires creativity. Too much yellow, however, also can overstimulate people making it difficult to fall asleep.
- **GREEN:** Green is calming, natural, balanced and motivating. This cool color is often associated with growth and renewal, and studies have shown that green increases feelings of hope. Green is often a safe choice for creating relaxing and receptive places.

- **BLUE:** Blue is the color of the sky and the sea and evokes feelings of serenity and peace. Unlike some warm colors, blue can lower heart rates and blood pressure. Too much of this color, however, can also create the blues, leading to feelings of despair and depression.
- **PINK:** Although often associated with romance and femininity, pink supports creativity and—in lighter shades—can be calming and stimulate happiness. Darker pinks share many similarities with red and bring energy and excitement to a space.
- **PURPLE:** Purple and the related colors of lavender and violet support imagination and insight. Lighter shades of purple also can be calming and have a similar effect on people as orange. Darker purples, meanwhile, share similar properties as blues.

Pro tip: If graffiti is a concern, several manufacturers now offer paints and coatings that repel materials such as spray paint and permanent marker.



A simple wall of yellow can brighten a person's day. When used with art, such as this painting of a smiling person, the effect can be even stronger. Wall paint, inexpensive tile floor, artwork, accent lighting (lamp) and furniture (blue is a complementary color to yellow) is a cost-effective way to change a room. Photo courtesy of HOK, photographer Andrew Bruah. Estimated cost for the room: Paint (\$500), floor and base (\$1000).

FURNITURE TYPES

Each piece of furniture within a space must address the needs of the individuals within the environment, whether that be a seat in a staff office setting or a place to set a coffee in a social setting. When selecting furniture, it's important to understand the function of the space, the activities that will happen in the room, and how an area will be used.

The construction and quality of furniture can vary, so requirements for durability, intended use and even size should be considered when making selections.

Residential Furniture

The most inexpensive and widely available furniture, residential furniture is intended for use within people's private homes. While the quality of residential furniture can vary greatly based on manufacturer and price, residential furniture is generally not as strong, safe and durable as the other furniture types listed here. For that reason, its use is not recommended for businesses and organizations that serve the general public.

Contract-Grade Furniture

Also referred to as commercial-grade furniture this is the type of furnishings often found in hotels, restaurants, offices, airports and other public and high-use areas. Contract-grade furniture undergoes testing for durability, stability and weight-bearing qualities. This furniture often comes with a seal from the Business + Institutional Furniture Manufacturers Association (BIFMA) vouching for the quality of its construction and ergonomics.

Healthcare Furniture

Healthcare grade furniture is contract grade furniture, but also adheres to additional standards. Furniture in healthcare needs to accommodate high traffic use, be easy to clean (chemicals, human fluids, dirt), hold a certain weight (bariatrics), and have different sizes / dimensions to be able to fit all types of people. A common characteristic of healthcare grade seating is a chair with arms and a seat height of 17 inches or higher so that it is easier to get in and out of. The legs of healthcare grade furniture are often metal for easy floor cleaning and durability, although wood legs are acceptable.

Before choosing a furniture type, organizations should consider how and where a piece of furniture will be used. While healthcare furniture is more durable than other furniture types, it's also more institutional looking and may not look good in a reception space or other area where aesthetics are important. Contrarily, contract-grade furniture probably isn't a good fit for rooms that require heavy cleanings with bleach and other disinfectants.

Pro tip: Always take a look at a furniture's warranty and recommended use before making a major purchase.



A blend of cool and warm colors help balance the mood in this room. The multiple light sources make it interesting. The furniture is all BIFMA approved with healthcare seating heights. Child-size furniture invites younger guests to feel welcome. The large screen provides both entertainment and information. Photo courtesy of HOK, photographer Andrew Bruah.

FLOORING

Flooring is often the first thing people notice about a space. Flooring impacts the aesthetics, comfort, feel and durability of an environment. Like other design elements discussed in this guide, flooring should support the needs and use of a space. Flooring types include hardwood, carpet, laminates and tiles, each of which have their advantages and disadvantages.

Hardwood

Although no longer common in new commercial construction, many older buildings have existing hardwood floors. Hardwood brings immediate warmth to a room, and older wood floors often can be refinished to return to their original glory. Wood floors can help with acoustics. New wood floors, however, are more expensive than many of the flooring types discussed here. Other disadvantages are that they can warp and buckle when exposed to water and humidity and are less resilient to wear and cleaning than some other floor types. For this reason, we do not recommend the new installation of wood in places such as basements, kitchens and bathrooms.

Carpet

Carpet immediately softens and quiets a room and is a great flooring option for controlling sound. On the downside, carpet is more difficult to clean than hard surface flooring and can absorb odors. Carpet is also susceptible to wear, particularly in high-traffic areas. For these reasons, it is best to choose contract-grade carpet that will stand up to high foot traffic and rigorous cleaning better than residential carpet. Look for contract-grade carpet that has a loop and/or a shorter and denser pile. If possible, also choose solution-dyed nylon-fiber carpets that retain their color and stand up to strong cleaning agents better than other carpet types.

Linoleum Tile / Sheet

Linoleum is durable and has a great appearance for a hard surface floor. It is made from natural raw and rapidly renewable materials (linseed oil, cork dust, pine resin and mineral fillers and jute backing) and is carbon neutral and recyclable. Linoleum flooring is very durable and easily cleanable with wet mopping and dry buff; no waxing is required. Linoleum is available in sheet, tile and planks and comes in a variety of textures and colors, including organic patterns for a stone, concrete or wood look floor.

Rubber Tile / Sheet

Rubber flooring is a PVC-free flooring option that is easy to clean, extremely long lasting and has high walking and standing comfort underfoot that contributes to pleasant room acoustics with inherent impact sound reduction. Rubber is also resistant to cigarette burns and very hygienic. Being dimensionally stable, rubber floors never shrink. All seams are permanently sealed, and no joint sealing is required. Rubber flooring is available in sheet and tile and comes in a variety of textures and colors, including organic patterns for a concrete or wood look.

Vinyl Composition Tile

Vinyl composition tile (VCT) is one of the most common flooring options for high-use, high-traffic contract spaces. VCT is rigid tile that can be easily installed and is completely synthetic, allowing it to hold up well to spills and wet cleanings. VCT does need to be waxed and stripped regularly, so the life cycle cost impact of maintenance can be higher than other non-wax flooring option. Some VCT products can be maintained with no wax, however only if used in a low traffic area. While VCT generally does not have the warm residential feel of wood or some of the sheet vinyl products, it is available in a variety of colors. We recommend choosing VCT that is phthalate-free and made of recycled material and avoiding VCT that contains PVC, a persistent organic pollutant. For buildings that have existing vinyl tile flooring, be sure to check that it is not the older vinyl asbestos tile, which will require removal and abatement by specialists.

FLOORING

Sheet Vinyl/LVT

Sometimes referred to as luxury vinyl (LVT), sheet vinyl is a more pliable product. It can come in a variety of shapes such as squares, rectangles, planks or wide sheets that have a monolithic look. It uses a simple click-and-lock installation method. In addition to offering a variety of color options, sheet vinyl can mimic the look of natural flooring surfaces like hardwood, concrete and stone. Many of the larger sheet products can be sealed to prevent infiltration of moisture and bacteria if required. For a healthy environment, avoid PVC, and select a phthalate-free product that requires no wax. Sheet vinyl flooring generally requires regular wet mopping and dry buff. Choose a non-wax product to save on life cycle maintenance costs.

Pro tip: Sealing the impervious flooring also can trap moisture in the concrete slab below it, potentially causing damage. Be sure to have the slabs tested for water content prior to installation to evaluate any red flags.

Clay-Based Tile

Ceramic and porcelain tile are clay-based tiles that can be used for both floor and wall coverings. While they can have similar looks, porcelain has higher density that makes it more durable. Both ceramic and porcelain are water resistant and tend to have much longer lifespans than laminate and vinyl flooring. On the downside, ceramic and porcelain tiles are much more expensive than laminate and vinyl and much heavier, requiring that the subfloor be rigid and strong enough to support their weight. Grout between tiles can also be difficult to clean and can harbor mildew, mold and bacteria.

Pro-tip: Tiles in showers and other wet areas can be a slip hazard. Before installing floor tiles in bathrooms, make sure they have an OSHA-recommended coefficient of friction of 0.50 or higher.

Pro tip: Be sure to select a darker grout color for floors to avoid discoloration resulting from cleaning/mopping. Also, be sure to moisture seal the grout.

Polished Concrete Flooring

Polished concrete is the ultimate no-wax flooring material. With the proper floor-grinding equipment and experience, concrete polishing contractors can grind concrete surfaces, new or old, to a high-gloss finish. Concrete floors are easy to clean, requiring only occasional damp mopping. They also eliminate the need for messy waxes or coatings as well as the associated labor, time, and expense to apply them. Note: Existing concrete floors must be in good condition prior to polishing.

FLOORING

The following table offers a guide for the best flooring for specific room types.

| | RECEPTION | COFFEE BAR* | BATHROOM** | MEETING / WAITING | LOUNGE + SOCIAL | DINING HALLS | SLEEPING ROOMS |
|-------------------|-----------|-------------|------------|-------------------|-----------------|--------------|----------------|
| HARDWOOD | ✓ | | | ✓ | ✓ | ✓ | ✓ |
| CARPET | ✓ | | | ✓ | ✓ | | |
| VINYL | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| LINOLEUM | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| RUBBER | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| CLAY TILE | ✓ | ✓ | ✓ | | | ✓ | |
| POLISHED CONCRETE | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

*Kitchens (with cooking facilities) require code compliant finishes; as well as other items such as ventilation, sinks, etc. Any kitchen plans designs should ONLY be prepared by professionals such as licensed designers, engineers and architects.

**Linoleum, rubber and VCT (vinyl tile) can technically be used in these areas, however as they have seams, they require more maintenance.

CABINETS AND COUNTERS

Like flooring, cabinetry and counters come in a variety of materials each with its own advantages and disadvantages. Price is often the No. 1 determinant in selecting cabinetry and counters. But choosing solely based on price can lead to costly repairs and replacements if a material is ill-suited for how it is being used.

Solid Surface

Solid surface is a man-made material, made up of acrylic resin, polyester resin, or both. It can be heated to be curved or shaped. The main use of solid surface is for seamless countertops, but can also be used for signage, shower walls, and arms/table tops of furniture. It is non-porous, so it is often used in medical spaces for cleanliness. Solid surface is easy to maintain and easy to clean, though it has a higher initial cost than plastic laminate.

Plastic Laminate

Plastic laminate is a surface made of bonded plastic layers. Plastic laminate is most commonly used for casework surfaces including base cabinets, upper cabinets, shelving, and reception desks. Plastic laminate has a variety of colors, patterns, and manufacturers. This allows for a spectrum of design creativity through this material. It does not hold up well in areas with continual water spills and is difficult to repair.

Solid Wood

Constructed from pieces of hardwood laminated together with glue, solid wood counters provide a warm, organic surface that is wonderfully forgiving, gentle on dishware, and able to absorb the noise of a busy environment. Wood can also be repaired and refinished when damaged.

Stainless Steel

Most often used in food preparation and outdoor areas, stainless steel counters and cabinetry are extremely durable and resist stains, bacteria, mold and heat. Be mindful of using stainless steel on countertops as it will scratch.



The entrance and reception to a facility should look professional. The desk should be free of clutter and be accessible to people with disabilities. The receptionist should have visual access to everyone entering the space and seated in the waiting area.

HEALING POWER OF NATURE

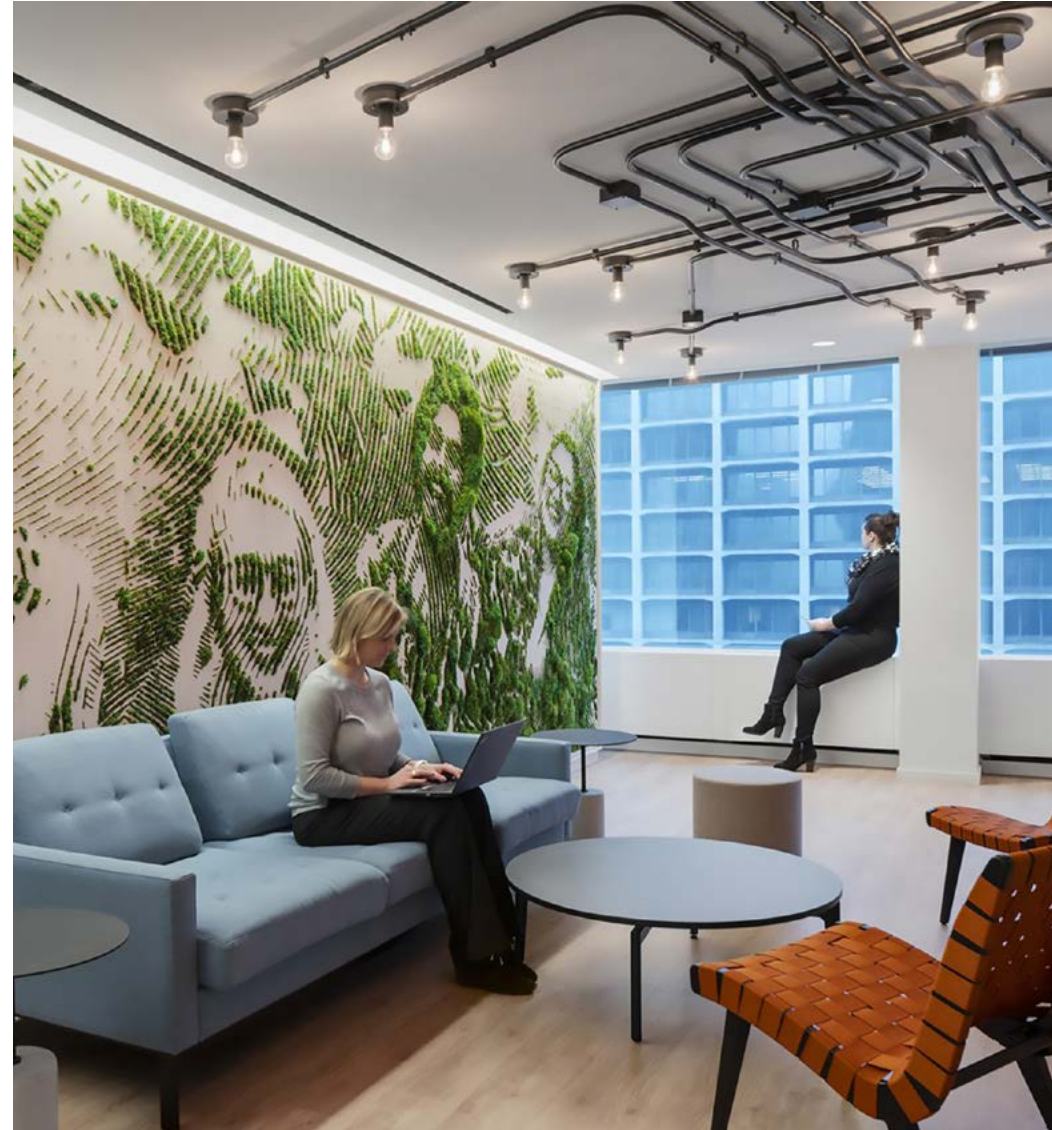
Biophilia is a term used to describe the deep psychological connection people have to nature. Biophilic design recognizes this connection—forged over thousands of years—and uses it to create spaces that incorporate natural elements in soothing and therapeutic ways.

Research has backed up the importance of biophilic design to reduce stress and aid healing. One of the first studies observed patients recovering from surgery. One set of patients were given a room that looked out onto trees. Another group of patients had a room that looked onto a brick wall. Patients in the room with the views of trees not only recovered faster, they also required less pain medication.⁹

Today, when we practice biophilic design, we first look for found opportunities. Can curtains and blinds be opened to allow for outdoor views and for natural light to enter the interior? Can doors and windows be opened to let in fresh air?

Indoor plants are an easy and inexpensive way to introduce biophilia into a space. Not only do plants help people de-stress, they help filter and clean the air. Natural elements like wood furniture and flooring and stone accents offer another way to incorporate biophilic design. Representations of nature, such as photos, art and graphics, can also offer the same calming and therapeutic effects of direct connections to the natural world.

Pro tip: If indoor plants are part of your biophilic design, make sure you have a plan in place to properly water and care for them.



Wall graphics are a cost-effective way to bring the elements of biophilic design to a space. In this instance moss has been used to create a beautiful mosaic of textures and color.

⁹ The Journal Science, "View through a window may influence recovery from surgery," Ulrich 1984

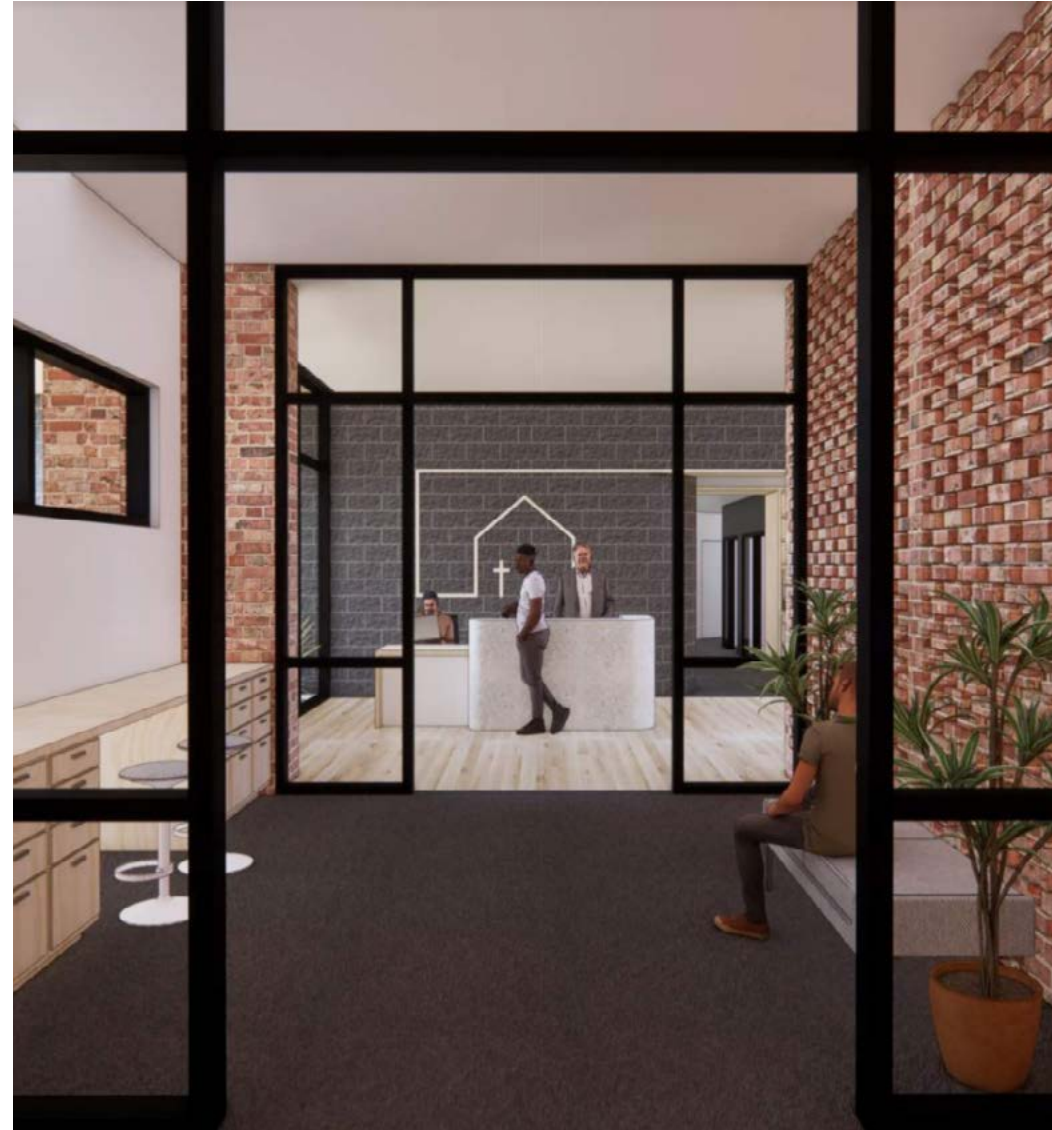
SECURITY & PRIVACY

Safety and security are important throughout the facility. In addition to being welcoming, a front entrance must be able to close and lock when needed. If closing at the end of the day, the exterior glass may need to be protected (depending on the location) from night vandalism. Facilities need at least one, if not more, exit doors in case of emergencies. These should also have cameras tied to a master security feed to make sure all entrants are known and welcome.

Ideally, most interior doors should lock for client and staff safety and security. Some rooms, such as conference rooms, do not always need a lock but may be requested for a 'shelter in place' scenario. Mailboxes and lockers should have locks so that clients have a secure location for their items.

Entrances and all building paths need to be well-lit with clear camera angles. On the interior, all lighting must meet code including emergency exit lighting and strobes. Dark hallways can seem threatening and therefore should be comfortably lit and cheerful.

The main entry and other strategic locations should have duress buttons that go immediately to security.



This entrance features a warm aesthetic with exposed brick, natural light and plantings while also providing clear sightlines to the street and a secure vestibule with space for storage and security screening.

LIGHTING

Lighting provides warmth, security and comfort. It helps regulate our moods and impacts our health, particularly the circadian rhythm that influences our sleep and wakefulness.

When considering lighting, it's important to evaluate its purpose and location. Reception and intake, for example, will require different lighting than a more private or quiet space, such as a sleeping area or work area. Before choosing new or replacement lighting, designers often assess the following four criteria:

1. Brightness and color temperature
2. Energy efficiency
3. Natural light
4. Variety

Brightness Levels & Color Temperatures

Not all light is the same. In fact, light varies widely particularly when it comes to color temperature—the color of light coming from a bulb. Color temperature is measured in degrees Kelvin. Bulbs with a low Kelvin cast a warmer, yellowish glow while bulbs with a high Kelvin produce a bluish glow.

The following chart can provide a guide for the best color temperatures for specific locations:

| COLOR TEMP. (KELVIN) | 2700K | 3000K | 5000K |
|----------------------|--|-------------------------------|----------------------------------|
| LIGHT APPEARANCE | Warm White | Soft White | Cool Daylight |
| AMBIENCE | Cozy, Inviting | Warm, Welcoming | Crisp, Invigorating |
| BEST FOR | Living Rooms, Kitchens, Sleeping Areas | Bathrooms, Entryways, Outdoor | Basements, Garages |
| | Table/Floor Lamps, Pendants | Vanities, Overhead Lighting | Task Lighting, Security Lighting |

Energy Efficiency

Light bulbs have become more environmentally friendly in recent years. Today's LED bulbs require just a fraction of the energy of yesterday's incandescent bulbs and as a result reduce energy costs. While costs for the LED fixtures and lamps may be higher than fluorescent, the longevity of the lamps and lower energy usage will quickly recoup the initial investment.

When updating or adding new lighting, it's important to understand watts and lumens. Watts measure the amount of energy a bulb consumes. In older incandescent bulbs, watts also were a measure of brightness. The higher the watts, the brighter the bulb.

Newer LEDs, however, can produce the same brightness as incandescent bulbs with far less wattage. For LEDs (and other high-efficient bulbs such as fluorescents and halogens) brightness is measured in lumens. The more lumens, the brighter the bulb. A 9 watt LED bulb that creates 800 lumens of light is just as bright as 60 watt incandescent bulb. In addition to saving energy costs, LED bulbs also have a much longer life-expectancy than incandescent bulbs (5-10 years compared to 1-2).

Pro tip: It can often make sense to experiment with bulb brightness to ensure a space has proper lighting for its intended purpose. Light that is too dim can make reading, working and socializing difficult. On the other hand, rooms that are too bright can cause headaches, anxiety and irritation.

Daylighting / Sunlight

As discussed earlier, natural light is both restorative and therapeutic. It helps us relax, grounds us in the moment and impacts our sleep/wake cycle. When possible, natural light should be used to complement artificial lighting.

Studies suggest that sunlight helps people with depression and anxiety by triggering the creation of serotonin, a hormone that regulates mood, emotions and appetite.¹⁰ Additionally, staff with more access to light are also more satisfied and more comfortable.¹¹

¹⁰ Sally Augustin, Place Advantage, Applied...

¹¹ Sansone RA, Sansone LA. Sunshine, serotonin, and skin: a partial explanation for seasonal patterns in psychopathology?. *Innov Clin Neurosci*. 2013;10(7-8):20-24.

LIGHTING

Variety Of Lighting

Incorporate a variety of lighting to make spaces feel interesting and inviting. The most comfortable spaces are those that include at least three different lighting sources, for example overhead lighting, lamps and windows. Dimming is another way to provide a variety of lighting levels.

Pro tip: Think of a sunny morning room with daylight, overhead lights and table lamps. This gives the room energy and cheerfulness from the sun, general lighting from the overheads for good visibility, and intimate pools of light from the table lamps that make people feel safe and secure.



Variation in lighting adds interest to a space. Zones can be created by anchoring furniture and placing suspended light fixtures directly above. It is important to ensure all areas within the facility are well lit.

VISUAL STIMULI

Art, graphics and other visual stimuli complement interior design and architecture. Visual stimuli can help us relax and inspire creativity and wonderment. On the other hand, visual stimuli that is overwhelming or provocative can evoke unwanted emotions like anger, anxiety and agitation. For this reason, visual stimuli should be thoughtfully applied with an understanding of how it will support the broader goal of a space or building. Visual stimuli is often associated with artwork, but it also applies to other elements of design and décor, including texture, color and layering and signage.

Physical Texture

From an evolutionary perspective, people respond to visual cues inside spaces that represent what they have found comforting outside. Texture is a visual cue that abounds in nature. Beyond providing visual depth, texture offers comforting and familiar physical connections to the natural world. Think of how tree bark feels on your fingertips or how grass and stone feel beneath your feet.

Indoors, texture can create similar feelings of comfort and familiarity. Textural wallpaper or fabric, for example, can break up monotony within a space and provide visual depth to an otherwise flat surface. Wall graphics with subtle patterns or organic imagery can provide a similar effect.

Pro tip: Keep in mind that texture can present issues with cleaning and maintenance. Because of this, textured surfaces should be used in a limited way.

Use of Color

Color itself can provide for visual stimuli. A single wall painted in a bold or bright color can enliven a room and provide a source of energy or amusement. Contrarily, a room painted in muted soft colors can help mitigate stress and foster concentration. (See “Paint and Color” section.)

Layering

Adding a sense of depth or interest (for example seeing a seating area, and behind that a quiet corner, and behind that a view to a garden) keeps a space dynamic and activates engagement without causing stress

Applying design elements in abundance also brings an element of joy to the space. An example of layering is using biophilia in a space along with a graphic wallcovering, offering both 2D and 3D elements. (See image on page 28)

Signage & Wayfinding

Signage and wayfinding needs to be clear and intuitive. Wayfinding and signage should be language-agnostic and easy to comprehend regardless of a person’s understanding of English or ability to read. When done thoughtfully, signage and wayfinding also can become visual stimuli similar to art, color and layering. Room signs, building maps and other signage can inject branding or whimsy that not only captures people’s attention but provides delight.

Pro tip: Be careful to not overwhelm the room when adding graphics, artwork and color. Empty walls provide a welcomed balance to a wall of information.

Art

Art can be an easy way to introduce visual stimuli to a space. Though people can experience art differently, the following tips can help ensure artwork resonates broadly:

- Locally produced art helps connect a space with community and can instill a sense of pride.
- Art adds cultural value to a space that can be inspiring and empowering.
- Art produced by clients is empowering, leading to feelings of self-worth.
- Realistic art of animals and/or landscapes tends to place people at ease, whereas abstract art can be unsettling to many people.

LEED & WELL

When possible, incorporate LEED (Leadership in Energy and Environmental Design) and WELL requirements into your spaces. Both LEED and WELL are third-party rating systems for buildings. LEED measures the environmental footprint of a building, and WELL measures how a building can support the health and well-being of occupants.

Developed by the non-profit U.S. Green Building Council, LEED includes a set of rating systems for the design, construction, operation, and maintenance of green buildings, homes, and neighborhoods that aims to help building owners and operators be environmentally responsible and use resources efficiently.

The WELL Building Standard is the premier standard for buildings, interior spaces and communities seeking to implement, validate and measure features that support and advance human health and wellness. Concepts of WELL touch on the quality of air, water sound, light and materials of the environment, as well as beauty, connection to nature, nourishment, movement and social equity.

Pro tip: Both LEED and WELL offer certification, but as that comes with a cost, following the principals and intent of the various credit categories can go a long way to providing facilities that are better for the environment, better for the staff and clients, and cost less to operate.



Furniture variation, such as standing height tables, encourage users to meet and interact casually and avoid sedentary behaviors. The addition of wall graphics can add warmth and serenity to a space. Location and graphic image must be properly considered. Note large graphics require visual distance to be properly appreciated.

BUDGET

BUDGET REFERENCE MATERIAL

| SMALL SCALE RENOVATION CONSTRUCTION COSTS | | | | | |
|---|-----------------------------------|---------|---------------|---------------|--|
| Item | Description | Sq. Ft. | CAN Budget \$ | USA Budget \$ | Comments |
| 1.1 Demolition | | | | | |
| | Drywall partitions | 100sf | \$2,500.00 | \$2,000.00 | Removal of existing walls without power |
| | T-bar Ceiling | 100sf | \$150.00 | \$120.00 | Removal of t-bar ceiling (not including lighting) |
| | Drywall Ceiling | 100sf | \$200.00 | \$160.00 | Removal of drywall ceiling (not including lighting) |
| | Door + Frame | | \$200.00 | \$160.00 | |
| | Carpet or VCT | 100sf | \$200.00 | \$160.00 | Remove & dispose of flooring |
| | Ceramic tile | 100sf | \$325.00 | \$260.00 | Remove & dispose of floor tiles |
| 1.2 New Construction | | | | | |
| | New T-bar Ceiling | 100sf | \$1,850.00 | \$1,500.00 | Based on standard t-bar specifications |
| | New Drywall Ceiling | 100sf | \$4,000.00 | \$3,200.00 | |
| | Door + Frame | | \$1,800.00 | \$1,425.00 | Paint grade or hollow metal door & frame. |
| | Lock for door | | \$1,750.00 | \$1,400.00 | |
| | Door closer | | \$1,500.00 | \$1,200.00 | |
| | Drywall partitions | | \$1,750.00 | \$1,400.00 | 10'-0" of drywall partition approx 9'-0" in ht |
| | Glass wall | | \$4,000.00 | \$3,200.00 | 10'-0" of gazing approx 9'-0" in ht |
| | Paint for walls | | \$30.00 | \$25.00 | 10'-0" of wall paint |
| | Vinyl wallcovering for walls | | \$6,000.00 | \$4,750.00 | 10'-0" Of wallcovering installed (standard grade) |
| | Paint door & frame | | \$500.00 | \$396.00 | |
| | Flooring - carpet tile | 100sf | \$6,800.00 | \$5,400.00 | Standard commercial grade product |
| | Flooring - vinyl (LVT) | 100sf | \$1,000.00 | \$800.00 | Standard commercial grade product |
| | Flooring - Tile | 100sf | \$2,000.00 | \$1,600.00 | Standard commercial grade product |
| | Single glazed entrance door | | \$7,500.00 | \$6,000.00 | |
| | Double glass entrance doors | | \$10,000.00 | \$8,000.00 | |
| | Kitchen millwork (lower cabinets) | | \$16,000.00 | \$12,700.00 | 10'-0" plastic laminate fronts with Corian counter top |
| | Kitchen millwork (upper cabinets) | | \$5,000.00 | \$4,000.00 | 10'-0" plastic laminate fronts |
| 1.2 New Electrical | | | | | |
| | Lighting - Pendent fixture | | \$600.00 | \$475.00 | Per LED light fixture installed |
| | Lighting - 2'x4' fluorescent | | \$300.00 | \$240.00 | Per light fixture installed |
| | Lighting - downlight | | \$375.00 | \$300.00 | |
| | New light switch | | \$500.00 | \$400.00 | |
| | Electrical wall outlet | | \$380.00 | \$300.00 | 1 duplex outlet |
| | Communication - data drop | | \$250.00 | \$200.00 | 2 COMM outlets |
| | Electric strike security device | | \$4,500.00 | \$3,600.00 | Single door installation |
| | Mag lock security device | | \$7,500.00 | \$6,000.00 | Single door installation |
| 1.2 New Plumbing & Washroom Accessories | | | | | |
| | New toilet (water closet) | | \$6,159.00 | \$4,880.00 | Commercial grade |
| | New Urinal | | \$6,300.00 | \$5,000.00 | Commercial grade |
| | New wall mounted sink | | \$6,550.00 | \$5,200.00 | Commercial grade with faucet |
| | New kitchen sink | | \$15,000.00 | \$12,000.00 | Commercial grade with faucet |
| | New shower stall | | \$4,750.00 | \$3,770.00 | 5'x5' prefabricated enclosure |
| | Grab bars | | \$200.00 | \$160.00 | 30" grab bar |
| | Paper towel dispenser | | \$650.00 | \$520.00 | Wall mounted |
| | New Fire Hose cabinet | | \$5,000.00 | \$4,000.00 | |
| 1.3 Furniture | | | | | |
| | Table & chairs | | \$2,100.00 | \$1,670.00 | Seats 4 |
| | Table & chairs | | \$2,800.00 | \$2,300.00 | Seats 6 |
| | Table & chairs | | \$3,500.00 | \$2,800.00 | Seats 8 |
| | Lounge chair | | \$1,200.00 | \$950.00 | Vinyl or cleanable fabric |
| | Coffee table | | \$750.00 | \$600.00 | Plastic Laminate - wood veneer |
| | Desk | | \$1,750.00 | \$1,400.00 | 72"Lx30"W (with 15" storage/file unit) |
| | Task chair | | \$500.00 | \$400.00 | |
| | Reception desk | | \$7,000.00 | \$5,550.00 | Standard Furniture systems desk 8'x8' |
| 1.4 Other | | | | | |
| | Area rug | | \$4,500.00 | \$3,600.00 | 10'x8' |
| | Task light/Lamp | | \$550.00 | \$440.00 | Commercial grade |
| | Privacy film on glass | | \$180.00 | \$145.00 | 10'-0" length by 3'-0" ht |

The costs are high level estimates ONLY and are not a representation or warranty that an organization's actual bids or negotiated prices will conform to the above. Different States and locations will vary in costs. Inflation and COVID supply chain issues may increase costs.
Note: Costs do not include consultant fees or any soft cost. If permitting is required to complete the work, please engage professional services.

CASE STUDIES

CASE STUDY:

FIFE HOUSE – HUNTLEY TRANSITIONAL HOUSING PROGRAM

TORONTO, ONTARIO

The Fife House Foundation serves people who are both living with HIV/AIDS and experiencing homelessness and/or housing insecurity. To better serve this highly marginalized population, Fife House needed a specialized space that could keep clients out of the city's emergency shelter system while providing them the clinical care and intensive case management they needed.

Opened in 2019, the foundation's Huntley Transitional Housing Program provides a solution in an innovative environment focused on support and healing. Located in a renovated facility near downtown Toronto, the Huntley Program provides housing for 20 residents and office space for 10 staff members. Clients living in the building receive three meals a day, intensive case management focused on finding permanent housing and access to clinical support including primary care, psychiatry and occupational therapy.



A wheelchair ramp offers accessibility to the Fife House, a historic renovation near downtown Toronto that provides services to people with HIV/AIDS who are also experiencing homelessness.



A social space inside the Fife House features live plantings, natural light and calming blue walls, all of which can help reduce stress.

CASE STUDY CONT. FIFE HOUSE

The design takes advantage of the building's historic architecture in many ways. Preserved stain-glass windows allow natural light to cast warm and playful prisms into public and private spaces. Wood-patterned laminate flooring and shelving complements the building's historic architectural elements—like mantels and fireplaces—while providing an extra layer of durability. Resilient, contract-grade furniture supports the building's residential feel and allows for easy cleaning and care. Vinyl and grout-free showers and floors limit the growth of mildew and mold in washrooms. A color palette of soft blue and neutral-colored walls promotes feelings of serenity and peace. Indoor plants and flowers add elements of nature into the space that support biophilia.

In its first year of operations, Huntley staff recorded over 5,000 face-to-face interactions with residents housed in the facility or on the waitlist.¹³ "I've spent 35 of my 65 years in and out of jail," said Gary, one of the facility's early residents. "If I didn't end up getting into Huntley I would have been on the sidewalk or back in jail. The staff here are great. They give me the support I need. I appreciate this more than you could know."

¹³ https://www.fifehouse.org/wp-content/uploads/FH_AR2019-20_5.5x8.5_FA.pdf



Vinyl and grout-free showers and floors limit the growth of mold and mildew.



A bedroom space includes adjustable lighting, storage and biophilic elements, including wood patterns, live plantings and natural light.



A bright and inviting kitchen encourages guests to spend time considering health and nutrition.

CASE STUDY:

MARK RIDLEY-THOMAS (MRT) BEHAVIORAL HEALTH CENTER

LOS ANGELES, CALIFORNIA

Los Angeles County is home to one of the nation's largest homeless populations. Each day more than 60,000 county residents experience homelessness. Many of those individuals also live with a mental illness or a behavioral health issue such as substance abuse. The county's new Behavioral Health Center addresses those needs in a building that offers one-stop, comprehensive care to its most vulnerable population.

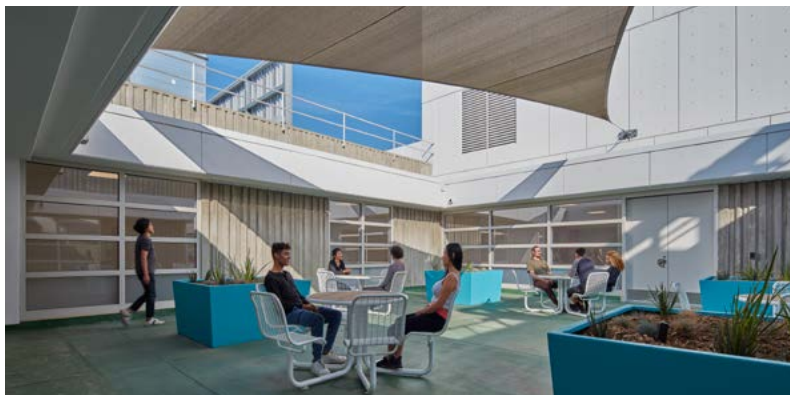
The county and its design and construction team transformed a shuttered public hospital into a state-of-the-art treatment center in less than two years. Building the same 500,000-sq.-ft. facility from scratch would have taken twice as long and cost twice as much. People visiting the Behavioral Health Center can access five different county agencies under one roof and receive services ranging from outpatient and residential treatment to workforce training and justice diversion.

The building's design prioritizes biophilia. Open spaces allow natural light to enter deep into the floorplate. In rooms without access to daylight, large wall graphics show images of nature. Clinical areas feature warm color palettes and soothing residential-inspired furnishings. A conference center and café are open to clients, staff and the general public. Artwork by local artists helps reiterate the building's connection to the community.

The design takes advantage of Los Angeles' mild climate. Exterior courtyards provide clients with access to fresh air and sunshine in a secure setting. An outdoor intake plaza includes lockers, storage for bulk items and access to restrooms.



The Mark Ridley-Thomas Center offers comprehensive mental health and substance abuse assistance for Los Angeles' most vulnerable populations.



Clockwise: A waiting room includes nature graphics, outdoor views and comfortable, yet resilient, furniture to put guests at ease. Outdoor lockers and storage stalls help speed intake to the center. A secure rooftop courtyard offer clients access to fresh air and sun.

CASE STUDY:

SHELTER KC KANSAS CITY, MISSOURI

Shelter KC is a 100-bed facility near downtown Kansas City that provides men with short- and long-term housing, meals, mental and physical health services, spiritual mentorship, job training, counseling and case management. For the past 30 years the organization has operated out of a four-building, 23,000-sq.-ft. complex that, while serving its immediate needs, has grown tight as demand for its services expand. To better accommodate its guests and provide a more welcoming face to the community, Shelter KC consulted with a professional design team on plans for a 12,000 sq.-ft. expansion and addition.

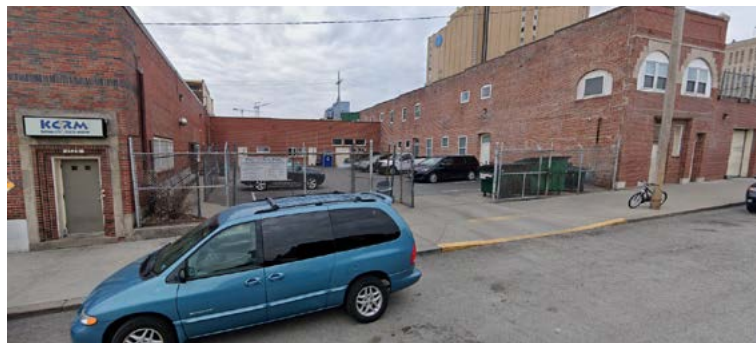
The design solution addresses many of the challenges facing shelters today, including how to provide clients with a sense of privacy and security in a manner that is welcoming, dignified and supportive. The addition would replace a surface parking lot and provide the shelter with a new entrance and reception, interior courtyard, chapel, multiple meeting rooms and sleeping quarters, and space for skill trainings and physical fitness.

Walking in off the street, guests would be greeted by a covered entrance designed to offer protection from sun and rain as they await access to the shelter. A light-filled entrance vestibule offers storage space for clients and plenty of room for safety and security screening.

Once inside the main building, clients are greeted to a central reception space with access to water, coffee, computer service and nearby restrooms. A color palette inspired by natural elements—clay brick, wood, water—imbue the extension with a warm and serene vibe. An interior courtyard off the reception area provides access to fresh air and connects to a chapel space for ministry and meetings.



The design for a new, three-story addition to Shelter KC includes a covered entrance, balcony and exterior mural for branding.



Clockwise: A new first-floor reception; a birds-eye view of the interior courtyard; a new entrance focused on hospitality and security; Shelter KC's current exterior and the parking lot that would be replaced with the addition.

CASE STUDY CONT. SHELTER KC

Above the main entry, a second-floor balcony offers clients additional opportunities to take in the outdoors in a safe and secure manner. A mural on the second and third-floor exterior of the addition would allow Shelter KC to share its message of hope and salvation.

Sleeping quarters can pose a particular design challenge for shelter operators. Traditional bunk bedding provides limited storage, little privacy and can be underutilized when top bunks are not taken due to people's personal preferences or disabilities. In response, the Shelter KC addition incorporates the use of Step Up, a novel bedding system that offers clients storage and privacy while still providing the space efficiency of bunk bedding.

Funding sources provided another challenge for Shelter KC and the design team. To qualify for multiple grants, the design broke the extension into separate building projects.



The Step-Up bedding system allows for double-height occupancy with storage and privacy. Images show standing view (top) and bird's eye (bottom) view of the Step-Up system compared to traditional bunks.

CASE STUDY:

YWCA TORONTO – 1ST STOP WOODLAWN RESIDENCE TORONTO, ONTARIO

YWCA Toronto's 1st Stop Woodlawn Residence is home to 134 women facing social and financial barriers and requiring emergency shelter, transitional housing or affordable supportive permanent housing. The 1960s-era building has served the YWCA and its residents well but is now in need of upgrades to improve its operations and support YWCA's Trauma-Informed Education and Development (TIDE)¹⁴ initiative that seeks to recognize how violence and trauma impact clients and the broader community.

Renovations underway to the building's kitchen, dining area, lounge and basement activity area will add a level of efficiency, beauty and warmth to shared spaces while also addressing health and safety issues. A renovated commercial kitchen will improve food operations and overall hygiene. A separate and new self-serve kitchen will offer women a safe and nurturing space to participate in their own food preparation and nutrition and gain skills and confidence to bolster their independence.

Updated dining and lounge areas will provide a balance of activity zones—from quiet to social. Commercial-grade furnishings and furniture add resiliency without compromising comfort. Expansive open areas allow natural light to reach deep into the renovated interiors.

Art, wall graphics and room colors support desired moods and emotions in each space. The renovation layout also prioritized security and comfort with consideration given to visibility and views and entrance and exit strategies.

¹⁴ <https://www.ywcatoronto.org/aboutus/tide>



Clockwise: A self-serve dining area and prep kitchen; updated dining area with wood accents and natural light; renovated activity room with a variety of seating and workspaces.

CASE STUDY:

SALVATION ARMY - CENTER OF HOPE A.K.A. RESIDENCES OF BISON TRAIL NASHVILLE, TENNESSEE

The Salvation Army's Center of Hope provides supportive housing for men, women, and families seeking to improve their quality of life. Originally opened as Center of Hope, the 84-person facility has rebranded as the Residences of Bison Trail. The name change allows school children and those applying for jobs to give an address that sounds more like a home than a shelter. The rebranding also brought about other changes designed to remove the stigma of staying in transitional housing.

Inside the Residences of Bison Trail, guests are welcomed in a daylit lobby with a reception counter modeled after a hotel or condominium concierge desk. Restrooms have been redesigned to resemble those in office buildings.

The Residences features three distinct living environments: The Suites (housing for up to 16 women); The Lodge (accommodating up to 16 men); and The Lofts (larger apartments for up to 12 families). The lounge in the women's section was modeled after a lounge in a Marriott Fairfield Hotel. The family lounge in The Lofts section was designed to resemble a Montessori classroom. Individual residences have drop ceilings, softer more-efficient lighting, dimmable lights and ceiling fans. To make the facility feel more like home, individual guests and families can paint their apartment door the color of their choice.

The impact this facility has had on its guests is impressive. More than 80 percent of people staying at The Residences on Bison Trail have gone on to find permanent sources of income and housing.



A concierge-like desk welcomes guests to the Residences of Bison Trail and reinforces the shelter's hospitality-inspired design that includes private guest apartments (with residential-style doors) and clean and modern restrooms and social spaces.



Create settings that are intimate and quiet. The dark blue wall in this seating area is calming and a beautiful backdrop to the yellow light fixture which anchors the seating area. Placing furniture against walls provided the user with a greater sense of security and visual access to adjacent spaces.

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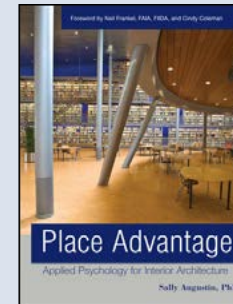
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ADDITIONAL RESOURCES

Sally Augustin, *Place Advantage, Applied Psychology for Interior Architects* (Wiley, 2009)



CLICK OR SCAN
FOR MORE INFORMATION:

Jill Pable, Yelena McLaine, Lauren Trujillo, *Homelessness and the Built Environment. Designing for Unhoused Persons* (Routledge, 2021)



CLICK OR SCAN
FOR MORE INFORMATION:

Podcast: Pam Light (HOK) & Dr. Scott Zeller, MD (Vituity): *How will mental health and remote work impact design?*



Michael T. Berens, *A Review of Research: Designing the Built Environment for Recovery from Homelessness* available via <http://designresourcesforhomelessness.org/>



U.S. Department of Housing and Urban Development *The 2020 Annual Homeless Assessment Report to Congress* via <https://www.huduser.gov/portal/sites/default/files/pdf/2020-AHAR-Part-1.pdf>





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