

MINIMIZE TRAUMA & SUPPORT RESILIENCY THROUGH DESIGN





INTRODUCTION

This document was developed by the United Way of Greater Los Angeles, the Trauma and Resiliency Informed Care workgroup and a group of dedicated interior designers at HOK. The purposed of the document is to give homeless service system leaders, providers and other community organizations a roadmap to recommendations, requirements and options for a well-designed environment that promotes a sense of safety and healing.

"The design of a physical space influences the mental state of the people in that space. That shapes their attitudes and behavior." Sally Augustine ¹

We feel strongly that design influences the feelings and behavior of the people that occupy that space. Because of that, we have tried in this document to provide some understandable ideas and suggestions that can be used in both new facilities, as well as those that are being remodeled within the homeless services system.

In all cases, those that are using this document should engage with professions that understand their local code requirements.

Special thanks to Sally Augustine, who has allowed us to use many quotes from her book "Place Advantage, Applied Psychology for Interior Architects" and HOK who encouraged our team to move forward and engage in this project.

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1. CLIENT / PATIENT PROFILE TYPES POPULATIONS WITH SPECIAL CONSIDERATIONS*

VETERANS (7%)

ADA accessibility due to physical disability

SURVIVORS OF DOMESTIC & INTIMATE PARTNER VIOLENCE (6%)

Privacy and safety are essential

SUFFERING WITH ADDICTION & SUBSTANCE ABUSE (Not Categorized Separately)

Avoiding potential "hiding spots" for people to use to consume (can be a safety issue should they overdose)

Consider triggers associated with addiction

WOMEN (Not Categorized Separately)

Options for women and women & children only quarters

BEHAVIORAL HEALTH (25%)

Exhibits hoarding, or other anti-social characteristics.

Soothing, calming environments are important as well as storage options

Consider neurological triggers

SENIORS (Not Categorized Separately)

Option for older folk only quarters—quieter, early lights off, etc.

ECONOMIC HARDSHIP (53%)

Experiencing homelessness for the first time

*Reported by the 2019 Homeless Count Numbers

MINIMIZE TRAUMA & SUPPORT RESILIENCY THROUGH DESIGN

UNITED WAY OF GREATER LOS ANGELES

In Los Angeles County, nearly **60,000** people experience homelessness on a given day. A quarter of them stay in shelter, while the other three quarters experience homelessness on the street. As public, private, and philanthropic partners work to build more affordable and supportive housing at an unprecedented scale—it is important that the new homes we build are dignified, safe places to live.



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1. CLIENT NEEDS & DESIGN CONSIDERATIONS

POPULATIONS WITH SPECIAL CONSIDERATIONS

Veterans Survivors of Domestic Violence Substance Abuse	Women & Children Behavioral Health Seniors Economic Hardships
CLIENT NEEDS	DESIGN CONSIDERATIONS
CREATE A SAFE & SECURE ENVIRONMENT	Location should have good visibility, be well lit at all times of the day, have security people visible.
PROVIDE PRIVACY	Provide a private space to collect client information and hear their concerns. Help patients focus on one task at a time to decrease distractions
REINFORCE PROCESSING AND UNDERSTANDING	Help clients with their problems and concerns. Prepare them for Permanent Housing. Create a welcoming and comforting space for the clients
REDUCE STRESS	Wayfinding & points of personalization or landmarks. Clean environment, including pleasant/clean scents. Easy access to restrooms and drinking water.
ADDRESS EMOTIONAL AND COGNITIVE TRIGGERS	Support, encourage and reassure: soft furniture, security. Restful circadian lighting schemes and daylight/sunlight.
PROMOTE HEALTHY LIFESTYLE	Facilitate holistic health improvements: nature, natural light, clean, integrate nutrition Encourage physical activity through design, for example: space to exercise, energetic colors, inviting stairways, outdoor paths Provide choice of social or quiet spaces to support behavioral health
*see section 4 Design Strategies for detailed information	
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2. STAFF PROFILE TYPES

FRONT OFFICE / INTAKE STAFF

24/7 Access and Day Centers Staff greet clients Conduct intake and assessments Run facility programming and onsite service Regular interaction with clients

SUPERVISORY STAFF

Onsite staff that manage and operate the shelter Exposed to low barrier facilities Regular interaction with clients 24/7 and overnight operation

CASE MANAGERS

Project-Based Supportive Housing Offices (people in supporting housing live independently in their own apts/ units; case managers and other operational staff are typically onsite during regular business hours, M-F) -

2. STAFF NEEDS & DESIGN CONSIDERATIONS

Intake Staff	Bridge Staff Permanent Housing Staff
CLIENT NEEDS	DESIGN CONSIDERATIONS
ACCESS TO DAYLIGHT/SUNLIGHT	Promotes health and wellbeing to all occupants in staff workrooms and lounges
24/7 NOURISHMENT	Proximity and convenience to healthy food and water (staff refrigerator, filtered water, fresh fruit if possible, etc.)
HOLISTIC ATTENTION TO STAFF NEEDS	 Consider and balance all staff needs (residents, facilities, etc.). A consistent conversation with staff, perhaps once a month on their needs, concerns, etc. allows a facility to continually evolve to a more supporting environment. Even if the need cannot be met, the conversation is helpful.
SPACES TO BREAK	Design spaces in the workspace facility that accommodate "micro breaks" to allow separation from work, provide space to sit, relax, eat This can be a coffee area, garden walk, quiet lounge, etc.
RELIEF FROM REMINDERS OF WORK	Uncluttered, quiet, calming and mindful respite areas. This is important to restore balance and energy. Suggestions are: • A room with a view to greenery. If that's not possible, add plants, or landscape art. • Soft lighting (approx. 2700K (see lighting).



A calming color such as aqua with natural lighting, plants and objects that say 'comfort' such as pillows, and throws can make a staff area a calming restorative retreat. Photo courtesy of HOK, photographer Bilyana Dimitrova.

3. SPACE TYPES

INTAKE

Lobby (Reception, Waiting Chairs, Calm Room) Waiting for Intake Interview Room Public Restrooms Staff Restrooms Charging Area for Clients Staff Break Room Private Office for staff Open Office for staff Lockers for staff Electrical, Mechanical, Building Support, etc

Clinic (recommended space): Reception desk area Waiting Staff Restrooms Patient Restroom Offices & business room Dispensary Main supply Lab Exam rooms Education and conference Airborn/ infection room Nurse station Sterilization Dentistry Janitor Employee lounge Clean holding Waste holding Utility room Electrical, Mechanical, Building Support, etc

BRIDGE

Lobby (Reception, Waiting Chairs) Cafeteria Kitchen for Cafeteria Bike Rack Pet Area Outdoor Area Kids Outdoor Area Residential Mail Area Women's Residential Rooms Men's Residential Rooms Residential Restrooms Staff Restrooms Private Office for staff Staff Break Room Nurse / healthcare office Security Office Electrical, Mechanical, Building Support, etc

PERMANENT HOUSING

Lobby (Reception, Waiting Chairs) Residential Mail Area **Residential Rooms Residential Restrooms** Pet Area Kids Outdoor Area Outdoor Community Space Community Room Cafeteria Kitchen for Cafeteria Computer Room Staff Restrooms Private Office for staff Staff Break Room Nurse / Healthcare office Security Office Electrical, Mechanical, Building Support, etc

4. DESIGN STRATEGIES

PLANNING

The layout of the space is a response to the function of the area. Be sure to engage (if you can) the staff and clients that will be using the space to understand their needs. The following are typical planning guidelines:

- Entry: welcoming (warm colors), well lit, easy to see, good signage, in open area (little risk to being surprised by someone hiding nearby), view to a smiling face as you near
- Reception / intake area: welcoming (warm colors), good lighting (3000K), clean, welcoming seating if needed that is placed against walls (so no one can come up behind), water easily accessible, healthy food (if desired), restrooms easily accessible, ability to quickly lock doors if needed to keep out intruders, duress button at desk that goes directly to security.
- Meeting rooms near the reception area for clients in need of privacy: some glass for visibility to see if someone inside needs help, but some areas that are obscured from reception if unwanted behavior is in the reception, lock on the door, duress button, phone.



Orange is an energy color – it makes a room feel warm and active. If you use it, be sure to include on only one wall – the deeper the shade the more appealing the color.

This room has good seating against the wall that allow people to feel safe (no one can come up behind them), the plants are relaxing, and the cartoon art easily understandable. Art that is easy to understand makes people feel comfortable.

4. DESIGN STRATEGIES

ACOUSTICS

Acoustics is the science and art of sound. More specifically, the branch of physics that deals with sound and sound waves. In relation to space, they are very critical to the quality of the room. Every environment is affected by sound. NRC, the noise reduction coefficient, rating is the arthmetic average of the sound absorption coefficients at 250, 500, 1000, and 2000 hertz. Materials and finishes either have or do not have acoustical properties. Hard materials such as tile, concrete, and metals do not have high NCR levels. Soft materials such as carpet, plush furniture, fabric wrapped panels, and acoustical tile ceiling have higher NRC levels. These are materials that can be used in rooms to reduce the sound.

Rooms that need extra focus on the acoustics include conference rooms, private offices, intake rooms, phone booths and large meeting areas. Room acoustical control is usually accomplished by acoustical material in the walls during construction, 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.

Soft materials in the room, as noted above, soften the sound vibrations in the room, making it more comfortable for general conversation, and allowing a better sound quality for conference calls.



Use of surface installed cork designed to look like bricks (on right wall), wood panels, plants, area rugs and fabric upholstery are excellent ways to add acoustics to a room while enhancing the aesthetics. Photo courtesy of HOK, photographer Eric Lagniel.

BIOPHILIC DESIGN

'Biophilic design is a concept used within the building industry to increase occupant connectivity to the natural environment through the use of direct nature (view outside), indirect nature (plants and nature photos), and space and place conditions...Biophilic design (design features that reconnect people with nature) could help reduce stress in the workplace. ... Such amenities are in line with scientific and psychological theories about humans' intrinsic need for exposure to natural environments — a disposition known as biophilia.'²

'Biophilic design can reduce stress, enhance creativity and clarity of thought, improve our well-being and expedite healing' ³

Biophilic design recognizes the psychological satisfaction inherent in living in spaces that use natural design theme (colors, forms, patterns of movement, etc.) When we incorporate elements from nature's style book into current places, we mimic nature, either overly or subtly.' ¹

Examples of biophilic design that can be used are:

- Views to nature (windows to the outdoors, or artwork showing nature)
- Plants (such as Spider Plants: One of the easiest indoor plants to maintain, the Spider Plant produces oxygen whilst purifying the air in your home and office by absorbing carbon monoxide, formaldehyde and xylene. Additionally, Spider Plants are non-toxic and are in fact edible, making them safe for pets and young children).
- Textures Natural materials such as wood
- Smells flowers

'All interior spaces can, with care be designed to provide the same full sensory experience as a meadow' 1









Biophilic design (plants and views to nature) provides reduction of stress. A simple row of plants, and a fun layout of lights can make a space relaxing and restorative. Photo courtesy of HOK, photographer Eric Laignel.

2. STAFF TYPES, NEEDS & DESIGN CONSIDERATIONS

3. FACILITY TYPES

4. DESIGN STRATEGIES CONT.



COLOR THEORY

Below are examples of healing colors with a description of the effect these colors can have on a person's mood, and the physical response they can on their body. In all cases color should be used sparingly – one painted wall, a large rug or piece of furniture for example is often enough for the color to engage in the room. We always recommend the rest of the space be neutrals, such as white walls and ceilings to bring in light and give a sense of cleanliness. Floors can be darker to both ground the space and detract from any soiling that has recently been tracked in. For example, a LVT wood floor would be a nice medium tone neutral and in additional would add the warmed of wood to the space.

Healing colors are the colors that influence mood, calm the nervous system and make the environments less provoking and peace inducing. Over the centuries, many cultures across the world have employed colors for their healing powers. Ev en today, Chromotherapy is an important tool for gentle healing treatment...Using these healing colors for a room or clothing, you can significantly change the patient 's mood and bring about many mind, body benefits. ⁶

1. RED

Red is a passionate and warm color which induces vitality and stimulates energy. It increases adrenaline and elevates blood pressure-so avoid using it when the patient is suffering from hypertension or is in an excitable state. This could be the reason why red is used only moderately in hospitals. At home though, you can use this color for stimulating appetite in weak patients. Red can also alleviate depression. It is one of the top healing colors for enhancing sexual appetite and overall vitality.

2. ORANGE (PEACH)

According to color healing therapy, orange is one of the best colors for hospitals and particularly for children's rooms. Orange radiates warmth and is associated with joy and happiness.

3. YELLOW

Search for healing colors for hospitals and yellow would be high up in the list. This bright and cheerful color can help stimulate intelligence and also detoxify the body and mind to heal patients quickly. Avoid overuse as people can quickly tire of this color.



A simple wall of yellow orange (gold) can brighten a person's day. When used with art that shows a smiling person the effect is even stronger. This is a cost-effective way to change a room, simple paint on the wall, an inexpensive tile on the floor in a nice simple neutral pattern (easy to clean) and color complementary seating (blue is the complementary color to orange), as well as the 3 light sources can change a person's mood. Photo courtesy of HOK, photographer Andrew Bruah. Estimated cost for the room: Paint (\$500), floor and base (\$1000).

2. STAFF TYPES, NEEDS & DESIGN CONSIDERATIONS

3. FACILITY TYPES

4. DESIGN STRATEGIES CONT.



4. GREEN

Green color is known for its balanced healing properties. It is a restful color that symbolizes growth and renewal. It also encourages comfort and equilibrium and is particularly beneficial for the heart, lungs and circulatory system.

5. BLUE

This spiritual color is also the color of the sky and sea. Blue is an important healing color as it is linked with calm and serenity. It helps lower blood pressure and can reduce rapid heart rate. Blue is relaxing for the mind and body. Do not use too much blue, as in large quantities it can cause depression.

6. PINK

Pink is feminine yet a soothing color that shows caring and affection. It is a protective and compassionate color that heals and soothes. This lighthearted color can stimulate happiness. Too much of bright pink might stimulate energy and incite passionate behavior just like its distant cousin Red. Pink can be however be safely useful in hospitals and prisons to reduce erratic behavior.

7. PURPLE

Both, purple and violet, as well as its related shades like lilac and lav ender are connected with spirituality. These healing colors are also linked with perception, higher consciousness and insight. Health wise. They like their warmer cousin, orange, are very healing. ⁶



White and blue always feel fresh and clean. Remember to balance out the blue with white. Adding LVT wood flooring makes clean up easy and warms the room. Adding traditional moldings and details such as art and the fireplace mantel add homey interest. Note the clock and fire extinguisher prominently placed. This image is a good one to see the importance of lighting. When possible have at least 3 sources of light – this one has 4: daylight, overhead general lighting, sconces on the wall for interest and lighting over the sink.



Blue can be a calming color, if you use it, make sure there is daylight (or good lighting) and paint some of the walls white, so that the blue doesn't make the room depressive. Adding traditional moldings, fireplace mantels, and items of interest – such as stained-glass windows will make spaces feel inviting, interesting and comforting. Understandable art (versus abstract art) is easier for clients to relate too comfortably. Note the easy to clean vinyl upholstery, LVT flooring (to look like wood), and arms that protect the upholstery and give the unstable an easier way to sit and stand back up.



Hallways that are bright feel clean. Adding a wood look LVT and traditional moldings warm up the space to feel inviting. Adding an interesting feature at the end of a hall makes the journey more enjoyable and helps in wayfinding.



Adding a space for clients to use a computer or phone is important. They can reach out to family or friends, plus look for job opportunities.

All 4 photos are courtesy of HOK, photographer Karl Hipolito.

FURNITURE

Furniture is an industrial product, meant to be used for the function of humans in space. Furniture has the ability provide an intimate space with in a larger room without building walls. Furniture has a strong function. Each piece of furniture is designed with a purpose of function, whether that be a seat in a dining setting or a table to place your coffee cup on. It is important to understand the function of the room, the activities that will happen in the room, and overall how a space will be used when selecting furniture. The function of the space will drive the furniture of the space.

Furniture, like any other design category, has a variety of types. There is contract grade-furniture, healthcare furniture, and residential furniture. For public space, contract grade furniture (BIFMA) is needed. BIFMA furniture adheres to compliances and codes. This applies to schools, offices, restaurants, and any large public space. Contract grade furniture is designed for heavy use. The furniture has higher quality materials, stronger durability, and can hold a higher amount of weight.

Healthcare grade furniture is contract grade furniture, but also adheres to additional codes. Furniture in healthcare need to accommodate high traffic use, be easy cleanable (chemicals, human fluids, dirt, vomit), hold a certain weight, and have different sizes/ dimensions to be able to fit all types of humans. A common characteristic of healthcare grade seating is the seat height should be at least 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.



A balance of cool and warm colors help balance a rooms feeling. The 3 light sources make it interesting. The furniture is all BFMA approved with healthcare seating heights to allow to have easy seating positions. Children size furniture invite younger guests to feel welcome. Notice the rounded corners on their furniture for safety. The large screen provides both entertainment and information. Photo courtesy of HOK, photographer Andrew Bruah.

HUMAN COMFORT

One of the most important considerations when designing a space is the extent to which it provides an environment that is comfortable for its occupants. Aspects of comfort include; personal factors, health and wellbeing, thermal comfort, indoor air quality, visual comfort, noise nuisance, and ergonomics. ⁴

For the purposes of this document, it is important that all aspects of the facility are concerned about Human Comfort. In the reception, lobbies, intake areas be sure to include:

- Comfortable temperature remember ill and elderly usually need the space to be warner
- Pleasant odors are a strong indicator of a clean environment
- Clean fresh air fans are sometimes required
- Filtered water easily available
- Phone / computer or other means of communication
- Space for trash and recycling
- A safe area for personal items including bikes
- A safe area for a pet



A space with neutral colors that relies on texture (like the sofa velvet, the baskets and the chairs webbing) are very relaxing, especially when paired with a view outside. Having drinking water in easy reach assures clients that your care about their comfort. Photo courtesy of HOK, photographer Ben Rahn.

LEED & WELL

When possible, incorporate LEED and WELL requirements into your spaces. LEED defines options to increase the efficiency of your space, WELL supports the health of the people in it.

LEED, Leadership in Energy and Environmental Design, is a green building certification program used worldwide. Developed by the non-profit U.S. Green Building Council (USGBC) it 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.²

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. ⁵



MATERIALITY/ FINISHES

Materials and finishes in the space have a large impact on durability of the space. Every day the amount of possibilities of materials is increasing: New patterns, new technology to create stronger materials, new trends, more sustainable finishes continue to expand. The standard building finishes include paint, carpet, resilient flooring, tile, solid surface, wood and plastic laminate. Each has pros and cons, and work better in certain types of rooms.

Paint: Paint is a way to make a space feel new. When specifying a paint, be sure to specify paint with low VOC's (Volatile Organic Compounds). This is the healthiest and most sustainable type of paint. There are different sheens to paint, including:

- Eggshell or satin: standard level of sheen, used in office spaces (easier to clean than matte/flat which is often in homes)
- Semi-gloss: used in high-traffic areas, easy to clean areas, used in restrooms, exam rooms, high traffic lobbys
- Epoxy: used in high-traffic areas, used in corporate kitchens, medical rooms

Carpet: Contract Grade Carpet is meant to handle high traffic consistently. Typically, it has a shorter pile height than residential carpet, longer fibers will not withstand the high levels of foot traffic. When specifying a carpet, it is important to select a solution dyed nylon contract grade carpet. Solution Dyed Nylon is a pre-dyeing process meaning it dyes the nylon (which is a fiber) then the fiber is turned into carpets. It is often compared to being a carrot, where as other processes are compared to being a radish with the color only on the outside of the carpet. If solution carpet is not available, nylon will work as well, just not as color fast.

Resilient Flooring: Resilient flooring is a high performance flooring, including vinyl, rubber, and LVT. These floorings vary on the material each is made out of. The most common of these that is LVT (Luxury Vinyl Tile). LVT is easy to clean, easy to install, easy to replace (replace the damaged single tile), and has a wide variety of styles. LVT is commonly used in medium-traffic areas, staff lounges, community areas, reception, exam rooms, medical spaces, and eating spaces. Since it is easy to clean, it is preferred over carpet in areas with more foot traffic. This flooring has less acoustical properties than carpet, but more than tile.

VCT: Vinyl Composition Tile: the durable construction ensures lasting beauty in high-traffic areas, while flowing linear patterns, organic looks, and densely patterned earth tones effectively mask scuffs and soil in busy commercial spaces. This product has fewer design options than LVT, but provides a more durable product for less cost.

Tile: The two most common types of tile are ceramic and porcelain. They are both clay based and fired in a kiln, but porcelain has a higher density of clay and fired at a higher temperature. Ceramic is usually a color glaze on top, and porcelain is a through body color. Both of these types of tiles can be used on the floors, walls, and backsplashes. When specifying a tile, it is important to check the specifications and details of the specific tile because each tile does vary on location it can be used. It is also important to look at the slip resistance coefficient, be sure to compare with the code required resistance for your type of use.

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.

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.



SECURE STORAGE / PRIVACY

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

On the interior it is best to have most doors locking. Some for staff privacy and staff rooms, some for client privacy. Some rooms, such as conference rooms do not always need a lock but may be requested for a 'shelter in place' scenario. Mailboxes, lockers, etc. should have locks so that clients have a secure location for their items.

Exterior lights should be on at all times, especially at the entrance and all paths around the building with clear camera angles. On the interior all lighting must meet code including emergency exit lighting and strobes. Dark hallways can seem threating to a number of clients, and therefore should at least be comfortably lit and cheerful.

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

It is important psychologically for client, especially those who have known domestic violence, to feel safe.

4. DESIGN STRATEGIES

DESIGN SOLUTIONS	DESIGN CONSIDERATIONS
BRIGHTNESS LEVELS & TEMPERATURES	Consider function of space to establish appropriate lighting.
	Brighter and cool light stimulates energy levels, soft and warm light creates a more relaxed and calm environment.
	 Warm Lights are approx. 3000K (Kelvin) and are similar to home lighting at 2700K
	 Cool Lights are approx. 5000K, similar to outdoor light at noon, 5600K
	Reading is best at 4100K
	 Under warm lights we: 'prefer to resolve disputes with other people by collaborating with them and are less interested in avoiding these socially difficult situation'¹
ENERGYEFFICIENCY	Consider energy efficient lighting design such as LED fixtures, occupancy sensors and vacancy sensors.
	 Use of LED light sources (bulbs) increases energy efficiency by 40-50% over incandescent lighting.
DAYLIGHTING / SUNLIGHT	Reduce the use of artificial light by maximizing daylighting
	 When people with seasonal depression, and senile dementia are exposed to morning light, dramatic improvements in their conditions result. Although morning sunlight produces the strongest effects, daylight at other times of the day also significantly reduce depression staff with more access to light are also more satisfied and more comfortable'¹
VARIETY OF LIGHTING	 Incorporate a variety of lighting fixtures to make spaces feel interesting and inviting The most comfortable spaces are those that include at least 3 different lighting sources. For example, think of a sunny morning room with daylight, overhead general down 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.

4. DESIGN STRATEGIES

DESIGN SOLUTIONS

DESIGN CONSIDERATIONS

VISUAL & PHYSICAL TEXTURE	From an evolutionary perspective, people respond to visual clues inside spaces that represent what we have found comforting outside.
	 Consider stimulating sense and interest with a textural wallpaper or fabric. Do not make it too busy (as we see that as distracting and harmful – 'its easier to see trouble approaching in a simpler landscape pattern'¹
	 Wall graphics with subtle pattern or organic imagery are another textural alternative.
INTENSITY OF COLOR	Consider play of intensity and brightness of spaces to make spaces feel energized or calm. Brighter and intense colors stimulate energy levels, muted and soft colors mitigate stress. (See Color Theory Below)
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 the space, along with a graphic wallcovering layered together, to bring a balance of 2d and 3d as well as texture and visual print.
SIGNAGE & WAYFINDING	'People who cannot find their way through a building not only waste their own time and the time of the people waiting for them, but they also become stressed, and stress erodes health and wellbeing.' ¹
	 Wayfinding should be written (signs with words), graphic (maps or symbols) or intuitive (signals, like a strong light source attracts someone to a location, or a door to an important location is a different color from the other doors in a hallway).
	 It is important to remember that not all clients can read English – easy to understand graphics and intuitive wayfinding ease stress.
ART	 Art produced by a local connects the space with community
	 Art adds cultural value to a space that can be inspiring and empowering

- Art produced by clients is empowering, leading to feelings of selfworth.
- Realistic art with people, animals and/or landscapes is relaxing to the majority of clients. Abstract art is often unsettling.



A simple photograph on a wall with a message can inspire those in the room!

MINIMIZE TRAUMA & SUPPORT RESILIENCY THROUGH DESIGN

5. EXAMPLES



Rooms that are well lit with room lighting and daylighting lift our moods and feel welcoming. Add a splash of color and (like the back of the sofa) plants, carpet to absorb sound and the high back on the sofa make us feel safe. Signage integrated into the room can carry your message. Photo courtesy of DaVita.

Biophilic Elements in Design

To balance today's high-tech world, designers are introducing biophilic elements that evoke a feeling of nature and are calming, refreshing and relaxing. Biophilic design strategies can reduce stress, enhance creativity and clarity of thought, improve well-being, boost health outcomes and expedite healing for the neurodivergent and neurotypical.

METAPHORIC RELATIONSHIPS WITH NATURE



NATURE



& ORDER

DIRECT CONNECTION WITH NATURE



LOCAL/NATURAL









DIFFUSE LIGHT



EXCITEMENT



FRACTAL COMPLEXITY PATTERNS & NON-RHYTHMIC SENSORY STIMULI

NON-VISUAL/ MATERIALS



EXPERIENCE

NATURAL SYSTEMS



VARIABILITY

PROSPECT EXTERIOR / INTERIOR







AUDITORY

MINIMIZE TRAUMA & SUPPORT RESILIENCY THROUGH DESIGN



OLFACTORY

MYSTERY / PERIL &

5. EXAMPLES



Rooms that are well lit with room lighting and daylighting lift our moods and feel welcoming. Add a splash of color and a fun element (like the oval on the floor) and room becomes more welcoming and inviting. This type of space will support consensus building.





Areas that need to support families with children should be playful, with fun primary and secondary colors. Primary colors make up the basis of the color wheel and are the first colors babies can see.

It is very helpful if the furniture allows good visibility to everyone in the room, and a plus if children find the furniture friendly and playful – lifting everyone's spirits. Simple wall colors easily allow the upholstery colors to be changed if the existing staff tire of the colors.



Color can change the way people feel in a room. Blue is a calming color, good for concentration and thinking. Do not overuse or it can be depressive. Yellow is a happy color – brightening a room

5. EXAMPLES



Yellow is a happy color that stimulates appetite, but moves you along. Multiple options to sit to allow people to feel in control. 3 light sources keep the space interesting.

5. EXAMPLES



Outdoor spaces that support a pleasant walk among greenery will lift spirits and calm nerves. If the walk has places to sit it will feel inviting. Make sure these spaces have good lighting for security if they can be used later in the day. Photo courtesy of HDR © Dan Schwalm

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REFERENCES

FOOT NOTES / LIST OF REFERENCES

1 Sally Augustine, PhD book: Place Advantage, Applied Psychology for Interior Architecture

- 2 Wikipedia
- 3 Terrapin, Improving Health & Wellbeing in the Built Environment
- 4 Designing Buildings Wiki
- 5 wellcertified.com
- 6 Jacob Olesen, 7 Best Colors for Healing

DEDICATED HOK DESIGNERS

Pam Light

Sarah Geske

Katherine Long

Jordan Dunn