

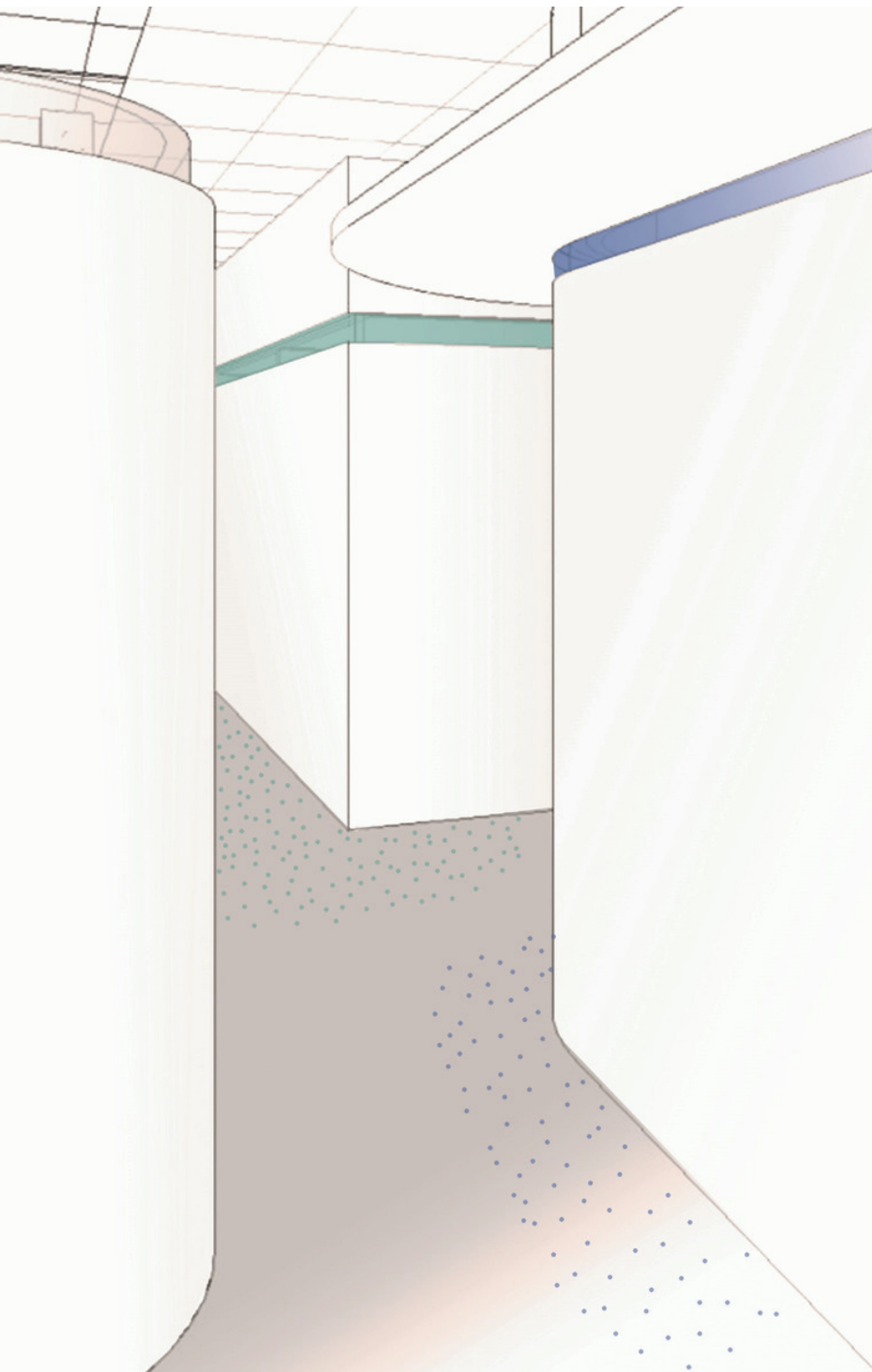
SUI JURIS

"in one's own right"



IDEC
COMPETITION

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DESIGNING FOR INDEPENDENCE

THE DESIGNER'S STATEMENT

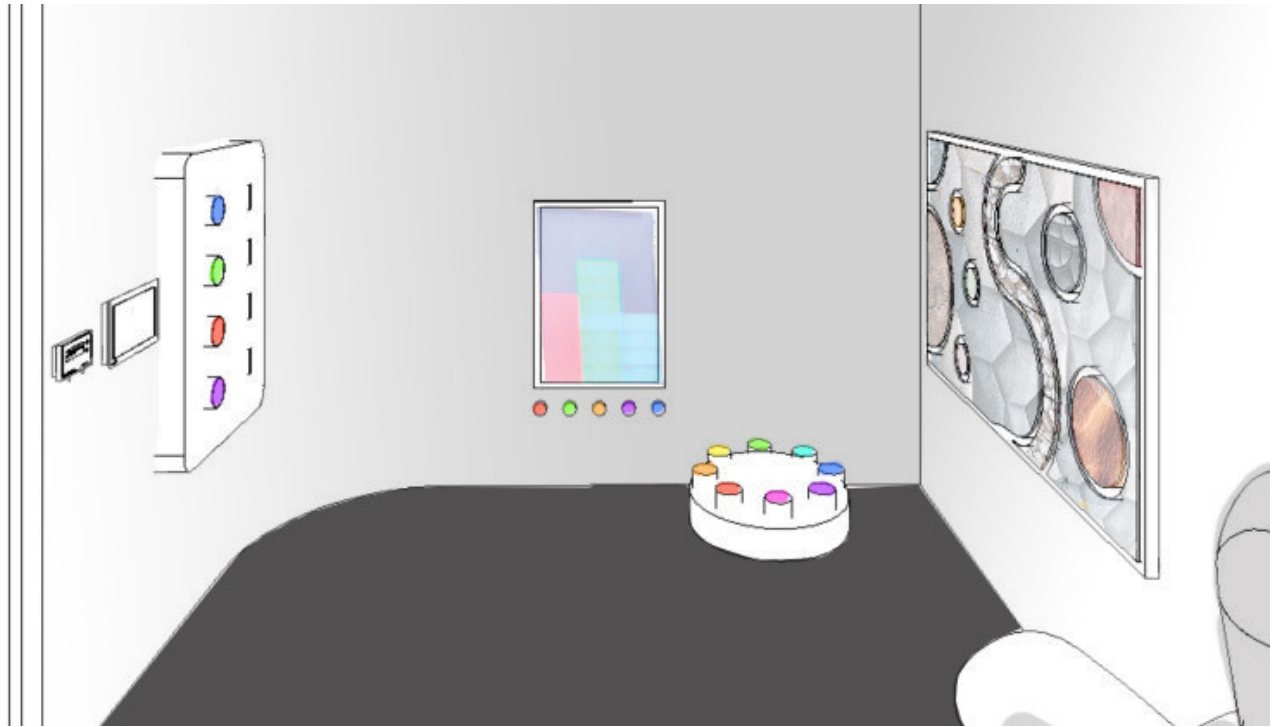
The Sui Iuris is a space designed to promote confidence and independence. Sui Iuris is designed for all disabilities from autism, downs and FAS; keeping in mind that all disabilities have differences and similarities. Sui Iuris provides a mock apartment and mock work environments to teach disabled individuals how to live independently. Because of the nature of the disabilities, Sui Iuris has a large sensory room and smaller sensory rooms to adjust to the differences and similarities each disability. Not only does it cater to the disabilities by having multiple sensory rooms, it is also designed to diminish distracting sounds, sights and smells to encourage learning.

“

WHEN IT COMES TO
SUPPORTING AND
CARING FOR
INDIVIDUALS WITH
AUTISM, THE
PHYSICAL
ENVIRONMENT IS A
VITAL COMPONENT
OF ANY TREATMENT
PLAN.

”

RESEARCH



In the United States alone 1 in 59 children have been identified with autism spectrum disorder, 1 in 700 babies are born with Down syndrome, and 1 in 500 babies are born with FAS; and the rates are slowly increasing. Those babies and children grow into young adults; teaching young adults to live independently is already not easy, then factor in Autism, Downs or FAS, other like cognitive disabilities, adds even more difficulties. So how do the parents do it? They get help from Centers for Independent living (CIL's). CIL's are specialized facilities to help teach disabled individuals how to do basic administrative work, culinary activities or other specialty types of work in order for disabled individuals to secure a job.

My task is to design a CIL but before I can start researching products for CIL's I need to research the users of CIL's: adults with Autism,

Downs, FAS or other like cognitive disabilities. I found that someone diagnosed with Autism have a hard time with social interactions, verbal and nonverbal communication, interpreting what others are thinking or feeling, interpreting facial expressions, body language, or social cues, regulating emotion, keeping up a conversation and that they tend to have repetitive or ritualistic behaviors, that can cause an outbreak of emotion. Sensory situations that may cause anxiety for someone with Autism can include: crowds, too much space, sounds or noise, natural disasters, and smells.

Someone diagnosed with Down Syndrome seem to have decreased or no eye contact, excessive mouthing of objects, self-stimulatory behaviors (such as

rocking, banging head, humming or screaming), decrease their interaction with people, they stare directly into lights and purposely banging into walls, furniture, or push or knock over objects.

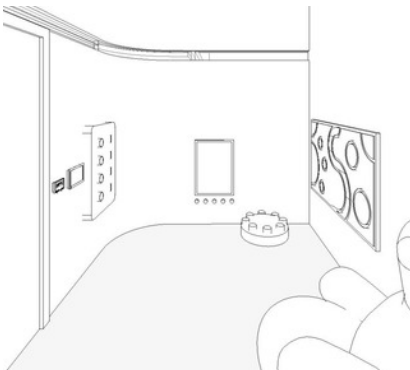
FAS (fetal alcohol syndrome) covers a wide range of problems, there are many possible symptoms, and can include: lack of focus, poor coordination, delayed development and problems in thinking, speech, movement, and social skills, poor judgment, problems seeing or hearing, learning disabilities, intellectual disability, deformed limbs or fingers, and mood swings.

While researching into the disabilities, I found that CIL's heavily rely on sensory integration spaces. A sensory integration space is a space in which people

go when experiencing a sensory meltdown, or panic. Providing a safe place to de-escalate can mean the difference between someone accidentally injuring themselves when chemically driven panic reactions occur.



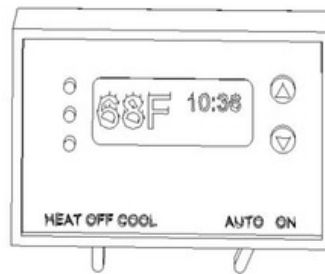
Sensory integration spaces may contain massage equipment, lighting that slowly changes colors, bubble tubes, calming scents, music, weighted blankets, bean bags, fidgets and other pieces of equipment designed for calming. Sensory rooms should be located away from busy thoroughfares where external noise could be an issue.



But I cannot design the whole CIL like a sensory room, because there needs to be the training rooms. I really need to remember that there are eight senses: vision, smell, hearing, taste, touch, vestibular, proprioception, and interoceptor, and that the users of this space have higher sensitivity to these senses. I need to do research on how to design spaces for people with high sensitivities and for people with lower sensitivities.

My research found that I need to have controllable ventilation, heating, and cooling; controllable lighting; provide sound insulation; keep the electrical fixtures out of the way.

Heat from electrical lighting products can bother people with certain disabilities, so it is recommended that a controllable air conditioner. But you do not want the room to get too cold so having a thermostat that controls the heating a cooling will help the users and caregivers better focus on the experience and task at hand, and not on the inside weather concerns.

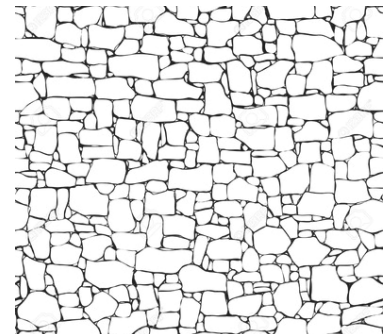


Florescent lighting tends to create a buzzing noise, which can lead to bothering or even stressing the users. It is recommended to use spotlights that are dimmable via a switch or a remote, to be able to control per situation.



Due to many of the disabilities struggle with noise, providing sound insulation in the rooms helps unwanted noise from

entering or leaving the room. Footsteps in the halls can cause distraction, so using a floor material that absorbs the sound of the footsteps would be recommended. But to also keep in mind that individuals in wheelchairs could be using the room, so consider including a durable floor covering that doesn't stop the wheelchair from moving about. Even the simplest things, such as hum of a heater, can cause distraction, so using a wall material that sorb sounds, will take away noise, that you would not think of.



Bright colors are generally the easiest to see because of their ability to reflect light. Distinguishing colors may be more difficult for some individuals who have low vision, so make sure that the hues of colors are noticeable for such users.





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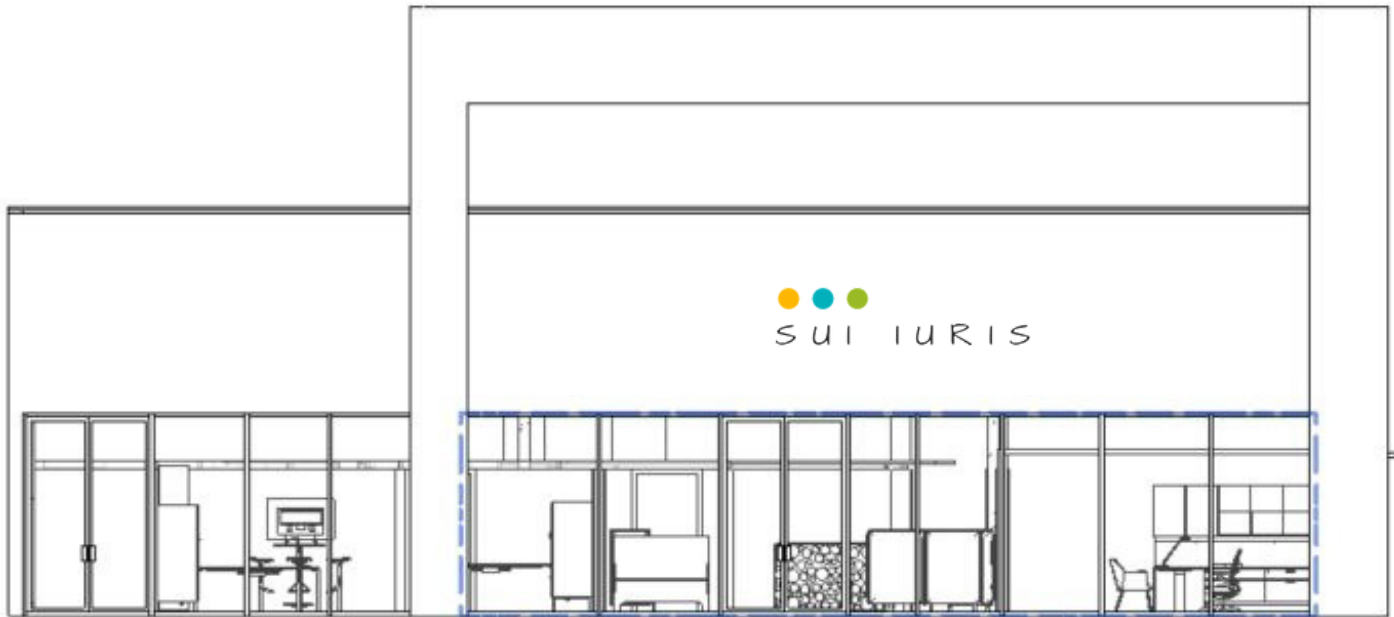
“

HE CAN'T READ
SUBTEST, DOES'T
UNDERSTAND
METAPHORS. HE
GETS OVER-
STIMULATED BY
THINGS.

”

Program

Design a small vocational facility center that increases the quality of life for individuals with ASD and their families. The center will contain a reception area, flexible multipurpose classroom, crafts area, mock apartment, mock office work environments, office spaces for staff, exercise space and a separate sensory space. The who center should be designed to address the sensory sensitivities individuals with ASD and provide ease of access to those who are mobility impaired.



Goals

- Design a fun and inviting reception area.
- Design a mock apartment, that truly resembles a living space.
- Design mock working environments that can mimic a real workspace.
- Design staff offices, to help them stay organized.
- Design multiple sensory rooms, to provide for differences in each disability.

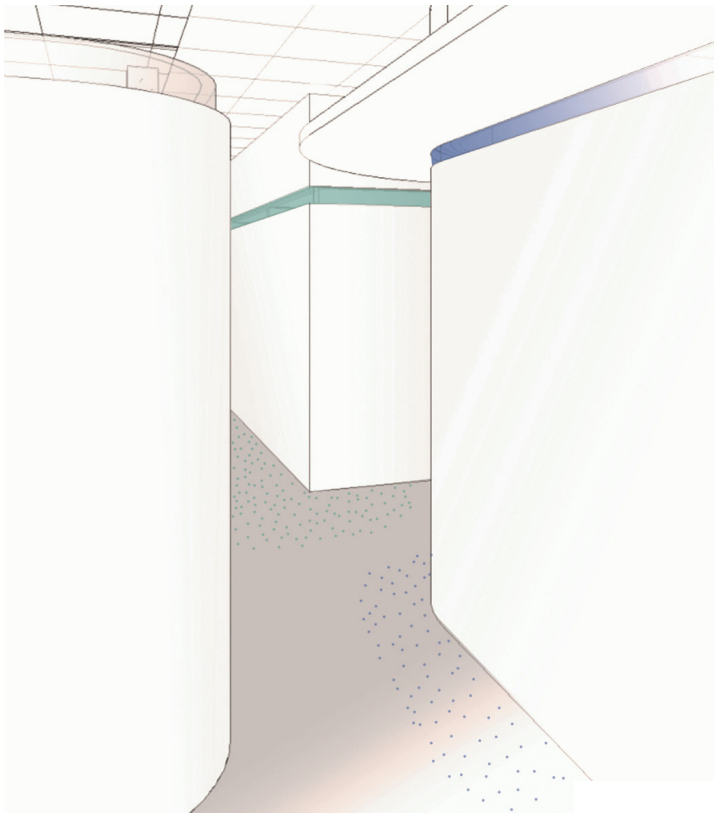
Objectives

- Analyze the requirements for center of independent living, and it's spatial requirements.
- Evaluate the most effective universal design strategies for the built environment to create the design.
- Select and justify appropriate building codes and the health, safety and welfare standards for the interior environment.
- Explore the most effective sensory products to create the design.

“

SHE
DISCOVERED
THAT SHE'D
NEED TO
EVALUATE
EVERYTHING

”



To the left is a rendering where color and shape are being used for way-finding. Each room is assigned a color (see below). Each room's exterior wall has a sliver of glass, to point the users to the correct room. If you look at the floor, you will see that there are specs of color to also guide the users to the corresponding room.

The rounded corners are meant to guide the users in that direction, while the sharp corner is meant to steer the user away.

There are four doors that exit.

Door 1 is an entry and exit for the staff, door number 2 is the entry and exit for the other users.

Door number 3 is a emergency exit.

Door number 4 is the exit that allows the dogs and users to go outside.





SPECIFICATIONS



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Wireless Controller

Item # 41148

★★★★★
WRITE A REVIEW

PRICE \$593.00
Prices are in US Dollars

QUANTITY: [ADD TO CART](#) [ADD TO WISH LIST](#)

DESCRIPTION

Make your Snoezelen room wireless with this controller. Features nine large, colorful buttons to wirelessly operate multiple products including pre-programmed Bubble Tubes (W39796) and (W39797), Color Changing Panel (W39327), Color Match Panel (W41114), and more. With nine external jack sockets to add your own switches. 20"dia x 4"H. Requires "AA" batteries (included).

CUSTOMERS ALSO BOUGHT



Sensory Magic™
Starter System

\$9,999.00



Starter Sensory
System

\$4,795.00



Interactive Controller

\$352.00



Fiber - Optic Light
Spray Set - Plastic 200
- Cable

\$1,262.00



Aura LED Projector

\$314.00

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Interactive Aroma Panel

Item # 20943R



WRITE A REVIEW

PRICE \$1,027.00

Prices are in US Dollars

QUANTITY: [ADD TO CART](#)[ADD TO WISH LIST](#)

DESCRIPTION

Activate smells, colors, sounds and breezes for aromatic, visual, audible and tactile stimulation. This panel features a frosted opal finish, four aromas, LED lights to indicate which aroma is being diffused, and 2 fan-speed settings. Compatible with Sensory Magic and Wi-Fi controllers, panel can be controlled easily and remotely. Can be wall-mounted either horizontally or vertically. Approximately 23 1/2" x 9 3/4" x 4 1/4".



CUSTOMERS ALSO BOUGHT



Aura LED Projector

\$314.00

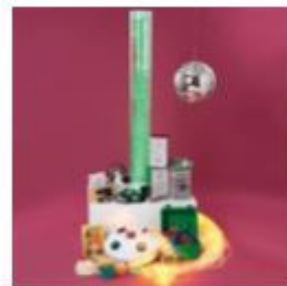
Sensory Magic™
Starter System

\$9,999.00



Sound to Light Panel

\$1,936.00

Starter Sensory
System

\$4,795.00

Curved Fiber Optic
Comb

\$433.00

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RumbleRoller® X-Firm

Zoom



RumbleRoller® X-Firm

Item # 19897

★ ★ ★ ★ ★

WRITE A REVIEW

PRICE \$60.00

Prices are in US Dollars

QUANTITY: 1

ADD TO CART

ADD TO WISH LIST

DESCRIPTION

The RumbleRoller is designed with flexible bumps for deep muscle penetration. Much like the thumbs of a massage therapist, the bumps knead body contours and gently stretch soft tissue in multiple directions to erode trigger points. Comes in black. X-Firm density. Measures 5" x 5" x 12", weighs 2 lbs.

CUSTOMERS ALSO BOUGHT



Yoga Mat

\$18.00



Aura LED Projector

\$314.00



Tiger Tail 18"

\$31.00



Laser Stars™

\$206.00



Rainbow Barrel

\$565.00

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Sommerfly™ Wipe Clean Weighted Blanket - XLarge

Item # 43132



[WRITE A REVIEW](#)

PRICE \$400.00

Prices are in US Dollars

QUANTITY:

1

[ADD TO CART](#)

[ADD TO WISH LIST](#)

[Ships in 2 week\(s\) directly from the manufacturer!](#)

DESCRIPTION

The Wipe-Clean™ Weighted Blanket is a perfect fit for hospitals, schools or any setting where machine wash is unavailable or inconvenient. Hospital-Grade made from high tech waterproof, breathable, tear resistant, anti-microbial fabric that is pleasant to the touch; ultra durable. Fabric is flame resistant and non-toxic. Wipe fabric clean with neutral soap or fabric-safe cleaner. Wipe or allow to air dry before next use. Do not machine wash or machine dry. Royal Blue. Extra-large 57" x 85"; weighs 25 lbs.

CUSTOMER REVIEWS

FAQS

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RumbleRoller®
X-Firm

\$60.00

FLAGHOUSE®

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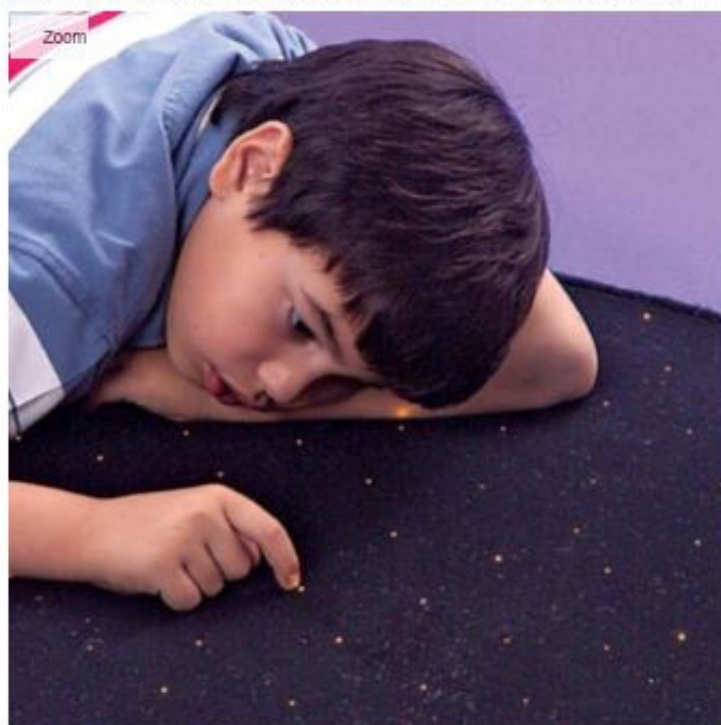
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Milky Way Carpet

Item # 3504

★ ★ ★ ★ ★
[WRITE A REVIEW](#)

PRICE \$783.00

Prices are in US Dollars



QUANTITY:

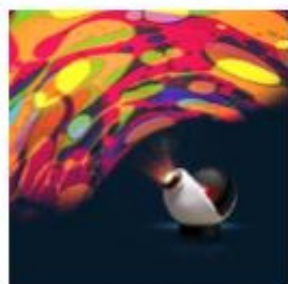
[ADD TO CART](#)

[ADD TO WISH LIST](#)

DESCRIPTION

Sturdy enough to walk on. Warm and comfortable to sit on. Optical fibers woven into the pile of the carpet provide both visual and tactile stimulation as they create a stunning, shimmering effect of continually changing colors. Lay the carpet over existing flooring, or attach to a wall. Wheelchair accessible. Light source included. SIZE: 78" x 39". Additional colors available by special order: Black , red, green, blue, or cream.

CUSTOMERS ALSO BOUGHT



[Aura LED Projector](#)

\$314.00



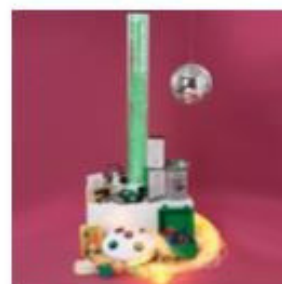
[Curved Fiber Optic Comb](#)

\$433.00



[Shimmering Light Curtain](#)

\$1,684.00



[Starter Sensory System](#)

\$4,795.00



[Fiber - Optic Light Spray Set - Plastic 200 - Cable](#)

\$1,262.00



Sound to Light Panel

Item # 20842R

★ ★ ★ ★ ★

WRITE A REVIEW

PRICE \$1,936.00

Prices are in US Dollars



QUANTITY: 1

ADD TO CART

ADD TO WISH LIST

DESCRIPTION

This sound-responsive wall panel is designed to be used by people with visual impairment or limited motor skills. The 10 light-display patterns are activated by sound volume, not by touch. The music is fully customizable via a memory stick or sound card and the sensitivity to sound is adjustable. Can be used karaoke or 'a capella' style (microphone included). It encourages vocalization, increases visual attention, and promotes understanding of cause & effect. Includes LED lighting which doesn't generate heat or need bulb changes. Can be enjoyed by people of all ages. Wall mounted. Approximately 45 ¼" x 28 ½" x 4 ½".

CUSTOMERS ALSO BOUGHT



Aura LED Projector

\$314.00



Color Match Panel

\$1,936.00



Starter Sensory System

\$4,795.00



Curved Fiber Optic Comb

\$433.00



Snoezelen® Sensory Satchel

\$2,060.00