RESET ROOM

(SENSORY ROOMS & CHILL-OUT ZONES)

DESIGN GUIDE

Contents

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We pay our deep respect to the Ancestors and Elders of Wadawurrung Country, Eastern Maar Country and Wurundjeri Country where our offices and campuses are located.

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Reset Rooms – Design Guide

The purpose of this guide is to assist designers, architects, building managers, government, educational institutions, organisations, and event managers to create spaces that support neurodivergent people. General information is provided for consideration during the design process and is supported by examples of user profiles and experiences.

The guide has been developed by staff from Architecture & Access, Deakin University (Occupational Therapy, School of Health and Social Development), and Amaze.

Details presented in this guide are based on findings gained from research conducted as part of the Deakin University Occupational Therapy Honours Program (2022 – 2023) in collaboration with Architecture & Access. This research aimed to explore perceptions of people who have used and considered using sensory rooms in Australian public buildings and people with experience in the design and management of sensory rooms. A review of published guidelines and literature on design for neurodiversity, autism, and other relevant conditions has also been conducted. It is from this research data and review of other published guides on design for neurodiversity that this guide has been created.

This guide is intended for general application to inform a design process. Engagement with people with lived experience, relevant stakeholders, and specialist access/neurodivergent consultants is advised and recommended prior to the design and management of a reset room.

Neurodiversity

What is Neurodiversity?

Neurodiversity is a concept that recognises natural diversity in how people experience and interact with the world around them. There is no one "right" way of thinking, learning and behaving, and differences are not viewed as deficits. [1]

Neurodivergent is an umbrella term used to describe people with neurological differences from what is considered most common (neurotypical). The term transcends diagnostic labels but is commonly understood to include people with conditions such as autism, attention deficit hyperactivity disorder (ADHD), obsessive-compulsive disorder (OCD) and dyslexia.

Neurodivergence & the Built Environment

The built environment can act as a facilitator or barrier to participation, health, and well-being. It can influence a person's ability to live independently and participate meaningfully in daily life.

It is important to consider the needs of neurodivergent people when designing any building or space, not just specific rooms. By applying the Principles of Universal Design [2] and designing for neurodiversity, people of all ages, abilities, and backgrounds can be supported to participate in work, study, and the life of their communities.

Some neurodivergent people such as those who are Autistic or have ADHD, dementia, intellectual disability or post-traumatic stress disorder (PTSD) can have sensory processing differences. This includes having increased or reduced sensitivity to sensory input.

> Hypo-sensitive: under-responsive to sensory stimuli (seeking)
> Hyper-sensitive: over-responsive or intense response to stimuli (avoiding)

Sensory processing differences can vary greatly between individuals even with the same diagnosis. People may experience a combination of hypo- and hyper-sensitivities to different types of sensory input and these may be affected by factors, such as stress or fatigue.

1   Dwyer, P. (2022). The neurodiversity approach(es): What are they and what do they mean for researchers? Human   . Development, 66(2), 73–92. https://doi.org/10.1159/000523723 Abstract.
2   Connnell, B, Jones, M, Mace, R, Mueller, J, Mullick, A, Ostroff, E, Sanford, J, Steinfeld, E, Story, M, & Vanderheiden, G (1997). The principles of universal design: Version 2.0. Raleigh, NC: The Center for Universal Design.

People who are neurodivergent may also experience physical or "hidden" disabilities, such as chronic fatigue, arthritis,[3, 4, 5] and Postural Orthostatic Tachycardia Syndrome (POTS),[6] which can also affect the way people interact with the world and can impact their ability to participate in the community.

Terminology

Spaces provided to support neurodivergent people are known across the world by a number of different terms. These include:

- Sensory Rooms
- Chill-Out Zones
- Quiet Spaces
- Snoezelen Multi-Sensory Rooms
- Adventure Rooms
- Autism Friendly Environments
- Calm and Sensory Spaces
- Pausing and Retreat Spaces
- Private Spaces for Regulation
- Recreational Spaces
- White Rooms and Black Rooms
- Respite Spaces
- Pause Places
- Enclosed Sensory Gardens

In this guide, we have chosen to use the term **reset room** to describe any space that enables the user to self-regulate ('reset') their nervous system through the provision of sensory input, the reduction of sensory input, or a combination of both.

3   Li, Y., Xie, T., Vos, M., Snieder, H., & Hartman, C. A. (2024). Shared genetic architecture and causality between autism spectrum disorder and irritable bowel syndrome, multisite pain, and fatigue. Translational Psychiatry, 14(1), 476.
4   Van Rensburg, R., Meyer, H. P., Hitchcock, S. A., & Schuler, C. E. (2018). Screening for adult ADHD in patients with fibromyalgia syndrome. Pain Medicine, 19(9), 1825-1831.
5   Hoekstra, P. J. (2019). Attention-deficit/hyperactivity disorder: is there a connection with the immune system?. European Child & Adolescent Psychiatry, 28(5), 601-602.
6   Owens, A. P., Mathias, C. J., & Iodice, V. (2021). Autonomic dysfunction in autism spectrum disorder. Frontiers in Integrative Neuroscience, 15, 787037.

Considerations for Design of Reset Rooms

User Groups:

A reset room can be used by anyone experiencing discomfort from their environment and who would benefit from a dedicated sensory-controlled space to self-regulate. Reset rooms may be used by people of all ages, though some may be in environments primarily by particular groups, e.g., children, adult employees, teens, or university students.

Thoughtful design should consider the specific needs of all intended users, including supporters or carers of people that are neurodivergent. Consideration of all ages is advisable.

Broader Physical and Social Environment:

When designing a reset room, it is recommended that consideration is given to the broader context in which the room will be positioned.

Reset Rooms: Locate, Design and Manage

When designing a reset room, consideration should be given to how users will **locate** the room and how the **design** and **management** of the room will support users.
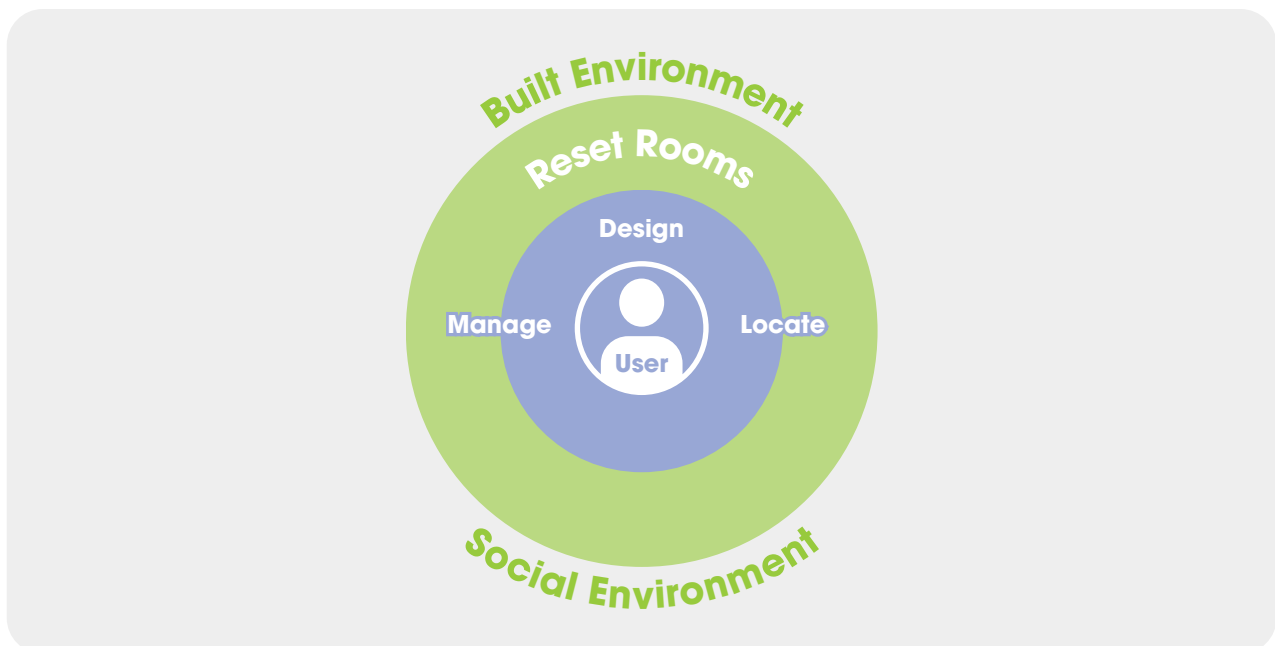

Image 01: Context and considerations for the design of reset rooms

Find

Where will the reset room be located and how will users find it?

Finding a reset room can be challenging, especially in an unfamiliar environment and when there is no universally recognisable symbol for these types of facilities.

Considerations:

- When designing a reset room, choose a location that will be easy to find and easy to access within the building.
- Consider multiple locations within a large public space.
- Reset rooms should be located close to sanitary facilities.

> "
> I searched for the location (of the room) on the website, and it was a long walk to find it... There was no signage pointing me in the right direction
>
> — Parent supporting an Autistic child

Inform

How will users know if a reset room is available?

Considerations:

- Provide information about the reset room on the building's website/ social media/ brochures. Provide details on the location of the reset room and the design of the room. This could be a basic floor plan and photos of the furniture, equipment, toys and other features provided.
- Provide information on how the room can be accessed or booked (if needed), if there will be staff present, and how to contact staff if assistance is required.

Locate

Signage and Wayfinding

> " I feel it (the room) needs proper signage as I honestly had no idea where I was going and trying to keep an eye on my son in a busy stadium and look for a room was very difficult.
>
> — Parent supporting an Autistic child

Considerations:

- Provide clear, consistent signage that assists people's navigation.

- Incorporate symbols and/or images in signage and wayfinding systems to support people who prefer image-based information. Provide/utilise landmarks as an aid to navigation.

- Provide static signs.

- Ensure lightbox/backlit signs do not flash, flicker or strobe. Avoid the use of flashing signs or highly active digital display signs, as they may be triggering for some users.

- Provide maps to enable anticipatory planning (on-site maps as well as online/downloadable, if possible).

User Story — Ann and Jane

Ann and her daughter Jane regularly use a reset room at their local community play centre. Jane finds loud environments difficult. The reset room allows Ann regular breaks from the noisy playground environment so she can stay at the centre for longer and get the most out of her visit.

Image 02: Mother and daughter playing (Canva)

Size

How big does a reset room need to be? What will be included, and who will be involved in the design process?

There is no clear evidence regarding the best size of a reset room. The size will vary depending on the available space, occupancy number of the building and type of building. The National Construction Code of Australia (NCC) 2022[7] requires that $3m^2$ per person is allowed for when designing gymnasiums. It is believed that this is a good comparative space and should be used as a guide for the design of reset rooms. Circulation spaces are to be provided, and floor finishes are to be traversable in accordance with Australian Standards (AS1428.1: 2009).

Considerations:

- A small reset room could comfortably accommodate one person or two people that know each other like a parent and the child.

- A larger reset room could accommodate 5-20 people, through the provision of different zones: one darker and more private space and other brighter spaces to allow for interaction or more free movement.

- The room should comfortably allow users to rest quietly and to move freely around the room. If relevant to the anticipated user group, there should be sufficient space to accommodate parents/carers and young siblings.

7   National Construction Code (2022). Retrieved from www.ncc.abcb.gov.au/editions/ncc-2022.
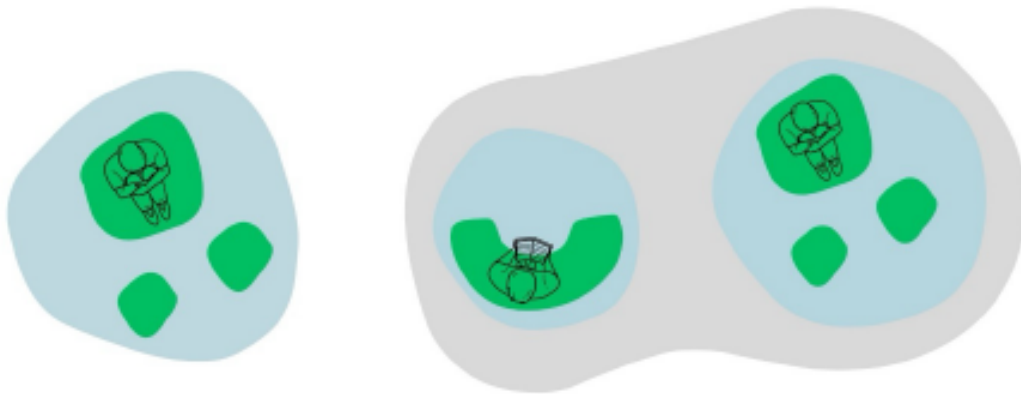
Design

Image 03 (above) :
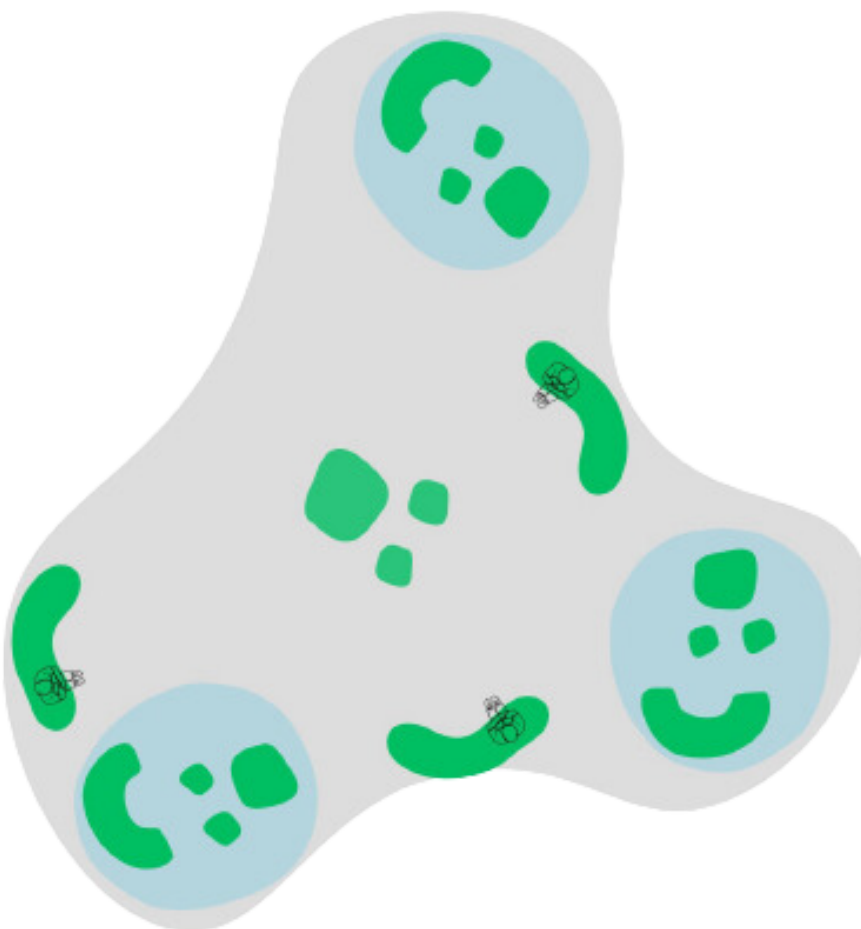Reset room options small and medium size (Architecture & Access).

Image 04 (above):
Reset room options – Large size room (Architecture & Access).

Acoustics

Sound can be a very challenging feature of the built environment. Background noise is often a major factor in sensory overload and distress for people who are neurodivergent.

Considerations:

- Consider the reset room's location in relation to what activities are happening in adjacent spaces and how noise may travel from other parts of the building.
- Using sound-absorbing materials can help mitigate the impact of noise and support people sensitive to noise.
- Use soft wood/construction materials for interiors.
- Include acoustic panels in the design of wall and ceiling finishes.

User Story — Tom

Tom is 18 years old and loves attending football games with his friends. Sometimes, Tom gets overwhelmed in unpredictable and loud environments. The reset room at the stadium allows Tom to take a break when he needs and continue to watch the game on a TV from the comfort of a bean bag. This allows him to participate in the event and offers accommodations for his sensory needs.

Image 05: Man with glasses smiling (Canva)

Lighting

Neurodivergent people are often highly sensitive to certain types and levels of lighting.

Considerations:

- Fluorescent lighting should be avoided as its pulsing/strobing effect can be very triggering.
- Provide lighting control, where practicable, so that lighting can be adjusted by users as required.
- For larger spaces, some areas may have more lighting and other areas of the space may include darker zones, providing choice for users.

Equipment

The room may offer toys and / or equipment for users, but the management of the space will play a key factor in determining what is provided. Considerations such as cleaning, maintenance, and replacement are essential. For instance, fully supervised reset rooms may include loose items, like sensory tools and activities. However, in cases where users access a reset room independently, loose items may not be practical due to concerns about user safety, hygiene, damage, or theft.

Considerations:

- Consider the weight and size of furniture and equipment. Lighter weight or portable items may allow users to modify the room to suit their needs but can also create safety risks as items could be used as projectiles.

- As seating, bean bags, privacy tents, or pod chairs may be considered.

- Fidget toys / tools, and small, weighted items may be provided for use while in the room.

- Provision for recharging personal phones or electronic devices may be useful.

Furniture

The design and type of furniture is important to consider. Many neurodivergent people are easily fatigued and/or experience increased body pain. Anxiety associated with sensory overload can also increase sensitivity to certain surface finishes.

Considerations:

- Comfortable seating is recommended. This might include a lounge chair or armchair with a high back and armrests.

- Beanbags can be useful as they provide deep pressure and can support many different sitting positions.

- Upholstery that does not crackle or squeak should be used.

- Textiles should avoid loose threads, loops or elements that can be picked at or easily detached.

Image 06: University of Brighton (Flickr, 2008)

Image 07: St Kilda FC chill-out room, (Amaze, 2024).

Image 08: Amaze office reset room, (Amaze, 2024).

The Appendix Table at the end of the Guide provides a comprehensive list of equipment, furniture and considerations for the design of reset rooms and outdoor sensory spaces.

User Story — Jess

Jess is an Autistic university student studying psychology. Sometimes she can experience sound sensitivity from busy areas and the overhead fluorescent lighting in the lecture theatres and libraries can bring on migraines. A reset room within the university allows her the autonomy to take a break and manage overstimulation. She appreciates the comfort of the beanbags provided and the privacy that the room offers her to decompress.

Image 09: Student with red hair (Canva)

Manage

> "
> The knowledge and information around sensory rooms can be very hard to find. Many businesses have sections on their website about accessibility and still don't have sensory information on there, such as a sensory map or presence of sensory rooms, which makes them harder to visit for the first time.
>
> — Autistic Adult with disability

How will the reset room be managed and by whom?

Consider if entry to this room will be controlled and by whom. Will a booking or registration system be required, how will this be set up, advertised, monitored and how will personal information be stored and used? It is important to consider if registration is required or if it limits access to the room in an impromptu manner. Details on methods of registration and accessing the room must be provided via websites/signage.

Considerations:

- How will staff managing access to the reset room be trained and what is their role?
- Safety of occupants must be considered, and a duress button may be required. Enclosing a duress button may be required to prevent accidental activation.
- Ensure material and furniture choices can be easily cleaned.
- Provide anti-slip flooring for safety, surfaces with rounded edges.
- Consider materials and finishes that are durable and can withstand unintended use.
- Ensure ongoing maintenance of the room so that it is welcoming. This means making sure the room is cleaned regularly and furniture or items within the room are kept in good quality.
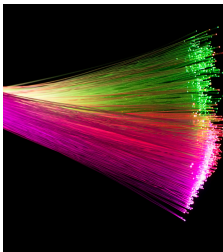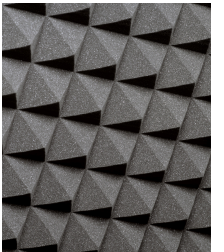- Provide appropriate storage to enable a neat and ordered space.

User Story — Eve

In her role as Manager of a large shopping centre, Eve has invested in sensory accessibility by making a reset room available to visitors. Eve has invested in sensory accessibility within her shopping centre. Since implementing the reset room, people who have used the room report being able to stay longer within the centre as they and their family can access a safe and private space to regulate.

Image 10: Woman smiling (Canva)

Appendix

This is a guide to some of the equipment that could be used in a reset room. Equipment selected will depend on a number of factors including, but not limited to, the proposed occupants and how the room will be managed. It is recommended that an access consultant or health professional is involved in the selection of equipment.

Item	Bubble Tube	Fiber Optics	Liquid Floor Tiles	Projector and Interactive Lighting	Interactive Infinity Panel
Purpose	Provides instant sensory feedback, including visual and tactile (through vibration).	Provides a variety of visual stimulation	Provides tactile sensation and interaction.	Provides visual stimulation	Offers opportunities for visual tracking, hand-eye coordination and cause and effect.
Image					

Item	Therapy Rocker	Space Tube	Bean Bag	High Back Swivel and Privacy/ Pod Chairs	Echo/Acoustic Panel
Benefit	May assist with stress reduction, self-awareness and proprioception needs.	Provides interactive spaces and proprioceptive sensory input.	May assist with calming and regulating, feeling physically safe and provides a form of deep pressure.	Provides privacy and reduces sensory input.	Provides tactile stimulation and sensory feedback, while also reducing background noise.
Image					

Images 11-20 sourced from Canva

References

1   Dwyer, P. (2022). The neurodiversity approach(es): What are they and what do they mean for researchers? Human Development, 66(2), 73–92. https://doi.org/10.1159/000523723 Abstract.
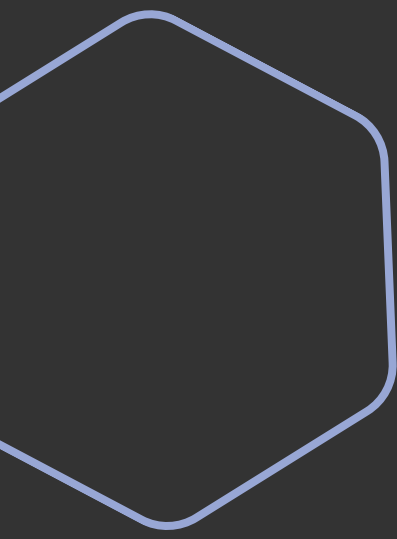
2   Connnell, B, Jones, M, Mace, R, Mueller, J, Mullick, A, Ostroff, E, Sanford, J, Steinfeld, E, Story, M, & Vanderheiden, G (1997). The principles of universal design: Version 2.0. Raleigh, NC: The Center for Universal Design.

3 Li, Y., Xie, T., Vos, M., Snieder, H., & Hartman, C. A. (2024). Shared genetic architecture and causality between autism spectrum disorder and irritable bowel syndrome, multisite pain, and fatigue. Translational Psychiatry, 14(1), 476.

4 Van Rensburg, R., Meyer, H. P., Hitchcock, S. A., & Schuler, C. E. (2018). Screening for adult ADHD in patients with fibromyalgia syndrome. Pain Medicine, 19(9), 1825-1831.

5 Hoekstra, P. J. (2019). Attention-deficit/hyperactivity disorder: is there a connection with the immune system?. European Child & Adolescent Psychiatry, 28(5), 601-602.

6 Owens, A. P., Mathias, C. J., & Iodice, V. (2021). Autonomic dysfunction in autism spectrum disorder. Frontiers in Integrative Neuroscience, 15, 787037.

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