



AUTISM-FRIENDLY DESIGN IDEAS

Autism or Autism Spectrum Disorder (ASD) is characterized by impairments in social reciprocity and communication and the presence of repetitive behaviors and restricted interests. It is called a spectrum disorder because of the range of symptoms and severity across individuals. Some individuals on the autism spectrum have difficulty processing and integrating sensory information and therefore may react differently than expected to information in the environment. Sensory processing difficulty is a breakdown of the neurological process that organizes the sensory information. Some children may overreact to environmental stimuli such as traffic noise, an airplane overhead, or even sunlight, while others may fail to notice or respond to this type of input.

This article provides an outline of issues to consider when planning and designing new spaces. Many of the ideas included will be beneficial to the general public, not just those on the autism spectrum.

Sound Issues:

- Excess noise can be at best distracting and at worst, sensory overload.
- Care should be taken to reduce sounds, rattles, and related noises from ventilation and related systems.
- Insulation from other noises in the environment (traffic, for example) is important for similar reasons.
- Plan to use an acoustic ceiling to reduce noise, as well as carpet, which will help absorb sound.

Lighting:

- Indirect lighting other than fluorescent lighting should be used because fluorescent lighting has a flicker and hum, which, though imperceptible to many, may be uncomfortable to the sensory sensitivities of many individuals on the autism spectrum.

- Ideally, lighting should be dimmable if possible.
- Some architects recommend pelmet lighting where the light source is not visible.
- If windows are present within the space and bright sunlight may be an issue, consider utilizing windows with shades placed between the glass rather than traditional vinyl shades.

Space-planning:

- Divide areas for certain activities, where possible, and segregate by color etc. (through use of floor finishes, different colored shelving, etc.).
- Be sure to incorporate “quiet rooms” within the building, which are spaces where a family can retreat when a child begins to get overwhelmed. Ideally, they should be located throughout the building so a family doesn’t have to go a long distance to find one.
- The space within the building should be easy to navigate to reduce confusion in how to get to different areas within the building.
- Long corridors should be avoided as they may make it easier for a “runner” to elope, a common response for many children with autism when they become overwhelmed.
- If possible, create at least one area where children can explore on their own and parents can supervise safely from the sidelines. For example, create an area with a single entry point, and place parent seating nearby. This will allow children to roam and explore independently without the risk of wandering off. Use low bookshelves or arrange things so parents can scan the area and locate their children.
- One architectural firm recommends curved walls because they help eliminate the surprise of coming around a corner and meeting someone unexpectedly.

Décor and design:

- Incorporate a low arousal, calming decorative scheme.
- Use calming, muted, and matte colors instead of bright and over-stimulating ones (including bright white).
- Make sure to use good signage and labeling that incorporates recognizable pictures. Consider consulting with PECS in Delaware for help with signage. They have created a Picture Exchange Communication System, which is

used by many individuals on the autism spectrum, but which is also helpful for all children in general.

Additional Resources:

- [Designing Environments for Children and Adults with ASD](#)
- [Designing Environments for Children and Adults with ASD \(PowerPoint\)](#)
- [Autism and the Built Environment](#)
- [The Impact of Building Design on Children with Autism Spectrum Disorders](#)
- [Designing Learning Spaces for Children on the Autism Spectrum](#)
- [An Architecture for Autism](#)
- [Arch Daily Website](#)
- [PECS Website](#)

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