

# Universal Design and Automated Home Storage

By definition, Universal Design is the creation of product and environments for the home that are meant to be usable by ALL people to the greatest extent possible. This means the young the old, the tall the short, the able bodied and the disabled should all be able to ideally function in the home at the same capacity. The intent of Universal Design is to simplify life for everyone by making products and the home environment more usable by as many people as possible. If you have ever been through an automatic door you have experienced a version of Universal Design. Placing electric outlets at a higher level where they can be easily reached if you are in wheelchair is another example of Universal Design.

Universal Design is getting popular for several reasons. Baby Boomers are getting older and they want their houses to be more automated and more functional. For example, elevators use to be rare in homes but are now becoming much more common place. People also realize that they need homes that will grow old with them. They want independence that comes with staying in their home forever. And lastly, people simply want more comfort and more access to all the space in their home.

Universal Design is a worldwide movement based on these concepts and the idea that all products and environments should be designed to consider the needs of the widest possible array of users. It is also known around the world as design for all, inclusive design, lifespan design and barrier free design.

Some of the principles and guidelines of Universal Design and how they relate to StorageMotion are as follows:

- Equitable Use - The product must provide the same means of use for all users and be identical whenever possible. It must try to avoid segregating or stigmatizing any users. A vertical conveyor from StorageMotion is used the same way by all people and is useful to all people. Each person can access the shelves at their own preferred access point yet because of the automation and the revolving shelves, ALL shelves can be brought to each individual's preferred access point giving the product excellent equitability of use.

- Simple and Intuitive Use - Unnecessary complexity must be eliminated and the product must operate within the users expectations and intuition. A motorized carousel from StorageMotion is equipped with a simple up and down switch. Press the toggle or rocker switch up and the shelves rotate up. Press the rocker or toggle switch down and the shelves rotate down. Nothing could be simpler and more intuitive.

- Flexibility In Use - The product design must accommodate a wide range of individual preferences and abilities. It must provide choice in the methods of use, facilitate the users accuracy and precision and provide adaptability to the user's pace. An automated shelving system from StorageMotion can be set up and installed in many different fashions in order to meet the user's needs. A custom floor to ceiling unit can be installed, a half sized unit can be installed with stationary storage underneath and a unit can even be setup and installed where a wheel chair can be brought underneath so that the user can be close enough to the unit that, even with very limited use of the arms, items can be selected and retrieved.

- Low Physical Effort - The design must be used efficiently and comfortably with a minimum of fatigue. It must allow a user to maintain a neutral body position, use reasonable operating forces and minimize sustained physical effort. An automated system of revolving shelves such as AutoPantry™ from StorageMotion eliminates the need for bending, stooping, kneeling and stretching. The shelves will revolve and come directly to you for easy access.

- Size and Space For Approach and Use - The product must have appropriate size and space available so that a user can properly approach it and use it regardless of the users body size, posture or mobility. A clear line of sight must be available for all important elements for any seated or standing person and all controls must be comfortably reached by all users. An automated vertical conveyor from StorageMotion can have its controls mounted just about anywhere if necessary. It is also much more approachable and easier to get to than standard shelving because a ladder or step stool is never necessary!