ABSTRACT

There has been a trend among the Baby Boomer Generation that we are seeing as they grow older. They are beginning to modify their homes to continue to live in as they need more care. There are a few problems with this and one of the biggest is the cost to retrofit a home to be accessible. There are many different products that specialize in accessible design, but they are rarely cost effective. Without an accessible living space it becomes nearly impossible to stay in the home as they begin to need more help.

The purpose of this study is not only to design a creative addition to a home, but to also find cost effective design solutions that follow accessible guidelines. The material selections, design solutions, and creative process are just some of the topics that will be further studied. Though there are accessible guidelines, they are minimal, and there is much more that should go into an accessible design. Thoughtful details that often get missed can help make a design successful and effective not only for the owners, but for the caregivers as well.

It is with hope that this study will inform on the importance of accessible design, the necessity for the details, and the significance of budget friendly selections. At this trend becomes more of a reality, the following research becomes more dire.

DESIGNING FOR ACCESSIBILITY

1. Make all flooring level, avoid anything that can become a tripping hazard like high pile carpeting or rugs. Keep all flooring transitions to a minimum of 1/4" to abide by ADA guidelines.
2. Instead of door/drawer knobs use pulls. A twisting motion becomes more difficult for people with muscular and arthritic disorders.
3. Texture and contrast make things easier to see especially when eyesight becomes worse with age.
4. Avoid sharp edged furniture. It can become a hazard for people who are unstable.
5. To comply with ADA guidelines, grab bars around the water-closet, and in the shower are important for safety of occupants.
6. All doors should be a 36” minimum opening to allow for wheelchair access.
7. Roll in shower with no lip is required to allow for wheelchair access. A shower bench is also important to enable ease of use for occupants.
8. ADA fixtures are to be used because they are specifically designed to aid in everyday use and comply with the guidelines.
9. Blues and Greens become very hard to see, so avoiding these colors and instead use contrasting colors to become more comfortable.
10. Adjustable lighting that is blue (4500-6500 Kelvin) during the day and amber (2000-3100 Kelvin) at night so that the blue light doesn’t interfere with melatonin levels. This helps when someone is more sensitive to blue light, rest easier at night.

FIXTURES + FINISH SELECTIONS

Open shelving in the bathroom allows for small baskets that can be used to store any necessary bathroom items. The baskets are used because they do not require any twisting of the wrist which can be painful. They are also helpful with organization and cleanliness of the space because the wall mounted vanity does not allow for storage.

3x12" Yacht Wood Daltile tile in Tassoul. The textured porcelain tile adds some grip to the bathroom floor for added support, especially when wet.

Oak flooring to match the clients existing Flooring. All flooring transitions must be 1/4” maximum to be ADA compliant. This is to add ease of wheelchair access and minimize tripping hazard.

The vintage Moroccan rug with some darker contrasting colors not only makes for an attractive space, but also brings some warmth to the rooms. Contrasting colors help with navigation for people with sight impairments, especially in the older generation. The rug is 1/4” thick keeping to the ADA compliant max.

This study revolved around a couple in their late 60’s early 70’s who has decided that they are going to add an addition onto their multi level home so that as they grow older they are able to continue living in their home. They have decided that they will add a master suite onto the East side of their home to accommodate their needs for accessibility and in home care. Aging in place has been the concept throughout the process. With careful research in evidence based design the addition has become a master suit that incorporates natural finishes and artful views to their ever-changing native landscape. The clients have a Scandinavian taste with a simple open floor plan fit for their collection of books and archaeological finds from their years in the field. The addition was important to incorporate in a way that fall natural to their already unique home and keeping to the architectural design. The final design was something that fit well in their existing space and mimicked their style. The most valuable part of the design was showing the clients exactly what could be done to meet their needs as an aging couple.