



Home Modification

There are a wide range of modifications available to make your home accessible such as levered door handles, special sinks, ramps, lifts and elevators. Since there are many considerations, it is important to begin outlining a plan well before you make the transition home.

Q: How soon should I start home modifications after an SCI?

It is best to get an independent home modification evaluation from an occupational therapist (OT) or physical therapist (PT) while you are in the hospital. The therapist will visit your home, analyze the different tasks you will need to complete, and compare those tasks to your abilities. Your hospital or rehabilitation center may have an OT or PT on staff who can visit your home to assess your needs.



Figure 1: Photo Courtesy of The Independent Living Center Inc., Joplin MO

Q: What is universal design?

Universal design is a term applied to an environment, structure, product, or service that meets the needs of any person regardless of their age, size, ability or disability. Beyond ramps, retrofits and curb cuts, the concept considers the diverse needs and abilities of all people during the design process, so the design is usable and convenient to the greatest extent possible. Universal design is not one size fits all, but rather explores more inclusive solutions without compromising the integrity or quality of the product or design.

Q: I can't afford to modify everything at once, what should I do first?

There is a wide range of design and product recommendations that can increase the

safety, comfort, convenience, and livability of your home. Sometimes it is only possible to include necessary items first and other modifications can be added later. Be sure you have at least one accessible exterior door, ideally the door from the garage to the home. You will also want to have a ramp installed and move your bedroom to the first floor. Other modifications to consider include raising a table and replacing doorknobs with levers. Since door frame widths can be an issue, a temporary solution is to remove the door from the frame. You can hang a shower curtain from a pressure rod for privacy until a pocket door can be installed. Some homes cannot be modified to meet the needs of the individual. In these difficult situations, you may need to sell and purchase a home that lends itself to remodeling or consider renting an apartment. If your home is too difficult to fully modify, sometimes adding an in-law apartment on to the home is a simpler solution. This will provide an accessible living area for the person living with paralysis and give them some degree of independence. This is a big investment that involves many considerations and decisions.

Home Modifications Considerations:

It is important to seek advice from an occupational therapist to assess what modifications are needed in your home. Some items to consider are:

- The width of doorways and hallways
- Space to turn around (especially in kitchens and bathrooms)
- Lowered or rocker light switches and raised electrical outlets
- Lowering or raising the height of kitchen and bathroom fixtures/appliances. Height of fixtures depends on whether you use a power or manual wheelchair.
- Levered door handles, keyless entry systems, and D-shaped cabinet pulls.

Check out the Reeve Foundation transitioning from rehab to home publication (<http://s3.amazonaws.com/reeve-assets-production/Transition-Rehab-to-Home-Booklet-1-10-19-FINAL.pdf>) for a more detailed checklist.

Q: Is there any funding to help with home modifications?

Medicare and most private insurance typically do not pay for home modifications; however, they may pay for assistive technology devices that are part of the modification process. For example, the cost of a ceiling lift may be covered, but the cost to install it may not. The U.S. Department of Agriculture offers Rural Repair and Rehabilitation Grants to improve safety and remove health hazards for people living

with a disability and may be an option if you live in a rural area. Your state's vocational rehabilitation program may be able to help depending on your situation. If you are a veteran or military personnel, the Department of Veteran Affairs may be able to assist. Some non-profits, such as Rebuilding Together offer assistance in the form of financial aid or volunteer labor. If there is an insurance settlement from your injury, those resources can help with modification costs.

Q: How do I know whether to sell or modify my house?

To better understand your options and needs, it is best to get an independent home modification evaluation. The costliest modification projects include changing floor plans, installing home elevators, and major kitchen and bathroom remodels. If your home only requires minor rewiring, ramp installation and door adjustments, your cost may be substantially less. You may consider saving money on major renovations by purchasing a newer home that offers main-level living, open floor plans, step-free entrances, and other basics of accessible design. There are many considerations in this decision so be sure to weigh all your costs, needs and options.

Q: My homeowner's association won't allow me to make modifications on my home—am I protected under fair housing laws or Americans with Disabilities Act (ADA) guidelines?

Under the state and federal law, homeowner associations must afford a person living with a disability equal opportunity to use and enjoy the premises, including private units and public and common use areas. Sometimes deciding reasonable accommodations in rules, practices, policies, or services requires a case-by-case determination but cost alone is typically not sufficient to render an accommodation unreasonable. Some federal and state laws may require that any modifications are removed from the common area when you move. You may be asked to restore the unit and any external changes to its original condition if you are a renter. It is a good practice to inform your homeowners' association or landlord in writing as well as have their response and requirements laid out in a document. This allows for clarity and prevents issues when you vacate the property.

Q: How do I find a contractor to do my home modifications?

It is important to work with a contractor who is familiar with home modifications that are up to code. Your state's vocational rehabilitation program or the Department of Veteran Affairs may have a database of approved contractors (you will want to be enrolled in their programs before asking). Other resources to find contractor recommendations may include state and local SCI support groups, accredited rehabilitation facilities and Centers for Independent Living. Home Depot and Lowe's (see their foundations' websites, do not ask at individual stores) and Habitat for Humanity have programs to support community-based home modification initiatives with grants and other resources for homeowners.

Q: Where do I go if my house is not ready when I get home?

It is important to assess and address your home modification needs as soon as possible after your injury to allow time to complete the work before you return home. You may be able to adapt your living room to stay in while your modifications are finished. If your home is completely inaccessible during renovations, you can look into temporary housing options such as an accessible extended stay hotel room, an executive apartment rental (often comes fully furnished) or short-term apartment rentals.

Q: I have an adult child who was injured but was planning to move out before they were paralyzed. What should we do about modifying the house for someone who may not stay with us long?

You should take into account the following factors: How long do you anticipate they will stay in your home? How much do you want to spend if it may be very short term? Will your adult child have the ability to live independently post injury? Do you think they will be able to return to school or work within a year? Is it cheaper to find an accessible apartment and stay there with your adult child temporarily?

Q: Can I benefit from a smart home design and is now a good time to start that?

Although home automation in terms of lighting and simple appliance or environmental control has been around for decades, recent technology now enables devices and appliances to be networked together for seamless control over many aspects of your home. With simple touchpads or voice commands using devices such as Alexa, Google Home, Siri, and Cortana, modern abilities include thermostat, drapery, lighting, TV, music and door locking control. Although adding smart controls to your home can be an initial investment, the addition of this technology can improve the safety (you can program it to call someone if you fall out of your wheelchair), security, efficiency, independence and convenience of daily life.

Sources: Center for Excellence in Universal Design, USA.gov Housing Help, Moriarty, Troyer, and Malloy Law Firm, HUD.gov, Christopher & Dana Reeve Foundation Preparing to Transition Home booklet

Need to talk to someone?

Our Information Specialists are available to answer your questions.

Call toll-free 1-800-539-7309 Mon-Fri, 9 am-8 pm EST.

Or schedule a call or ask a question online at

<https://www.ChristopherReeve.org/Ask>.

Resources for Home Modification

Accessible Properties

<https://www.accessibleproperties.net/>

A database of wheelchair accessible properties for sale or rent in seven countries.

Accessible Space, Inc.

<http://www.accessiblespace.org/>

2550 University Avenue, Suite 330N

St. Paul, Minnesota 55114

Phone: 651-645-7271,

Toll-free: 800-466-7722

TTY: 800-627-3529

E-mail: info@accessiblespace.org

The mission of Accessible Space, Inc. (ASI) is to provide accessible, affordable, assisted/supportive and independent living opportunities for persons with physical disabilities and brain injuries, as well as seniors.

AARP

<https://www.aarp.org/>

Typing “universal design” in the search box will bring up a range of articles.

AEMA: An Association of Members of the Accessibility Industry

<https://aema.com/>

12106 Colwick

San Antonio TX 78216

Phone: 681-230-2502

E-mail: secretary@aema.com

AEMA is an association of persons and entities with an interest in the Private Residence Elevator and Accessibility Equipment industry.

American Occupational Therapy Association: Home Modifications

<https://www.aota.org/Practice/Productive-Aging/Home-Mods.aspx>

Center for Inclusive Design and Environmental Access (IDeA)

<http://idea.ap.buffalo.edu/>

University at Buffalo

School of Architecture and Planning

3435 Main Street, Hayes Hall

Buffalo, NY 14214-3087

Phone: 716-829-5902

E-mail: ap-idea@buffalo.edu

The IDeA Center is dedicated to improving the design of environments and products by making them more usable, safer and appealing to people with a wide range of abilities, throughout their life spans. IDeA practices human centered design through research, development, service, dissemination and educational activities.

Center for Inclusive Design and Environmental Access: What is Universal

Design?

<http://idea.ap.buffalo.edu/about/universal-design/>

The Center for Universal Design

<https://projects.ncsu.edu/ncsu/design/cud/>

Universal Design Initiative: CUD | RED Lab

College of Design

North Carolina State University

Campus Box 8613

Raleigh, NC 27695-8613

Phone: 919-513-0825

E-mail: cud@ncsu.edu

A national research, information, and technical assistance center at North Carolina State University College of Design that evaluates, develops, and promotes universal design in housing, public and commercial facilities, and related products.

Extended Home Living Services (EHLS)

<https://www.lifewaymobility.com/chicagoland/>

210 W. Campus Drive, Suite B

Arlington Heights, IL 60004

Phone: 847-318-3312

Email: ehlsinfo@ehls.com

EHLS does accessibility modifications and accessibility consulting for homes and public buildings in northeastern Illinois, southeastern Wisconsin and northwestern Indiana.

Habitat for Humanity International

<https://www.habitat.org/>

Phone: 1-800-HABITAT (1-800-422-4828) or 1-229-924-6935

Habitat for Humanity builds simple, decent and affordable houses with people in need around the world, regardless of race or religion. Habitat for Humanity's commitment to build with people in need readily extends to those with disabilities. When possible, Habitat houses incorporate basic accessible design features, such as a zero-step entrance and wide passage doors and hallways. Houses built in partnership with families with disabilities include additional accessibility features.

Hire A Helper: Outfitting Your House for a Child with a Disability blog

<https://blog.hireahelper.com/house-modifications-child-disability/#space-thrive>

Homes for Easy Living Universal Design Consultants

<https://homesforeasyliving.com/>

Phone: 760-409-7565

Email: smack@homesforeasyliving.com

The company's mission is to enhance quality of life for people of all ages and abilities through community-based health and wellness programs, assistive technology and the incorporation of the principles of universal design in the design of communities, products, new homes and remodeling of existing homes.

HUD.gov: Housing Discrimination Under the Fair Housing Law

https://www.hud.gov/program_offices/fair_housing_equal_opp/fair_housing_act_overview

Infinitec Inc.

<http://www.infinitec.org/live/>

Infinitec staff helps people with disabilities find and get access to information, technology services, training, assistive equipment and specialists by creating partnerships that maximize resources. The Live section of the site has a section on home modification with lots of information and resources, including funding options.

Institute for Human Centered Design

<https://www.humancentereddesign.org/>

200 Portland Street, Suite 1

Boston, MA 02114

Phone: 617-695-1225 (voice/TTY)

E-mail: info@IHCDesign.org

The Institute for Human Centered Design (formerly Adaptive Environments) is an international non-governmental educational organization committed to advancing the role of design in expanding opportunity and enhancing experience for people of all ages and abilities through excellence in design.

The Minnesota Ramp Project: Making Homes Accessible

<http://www.ramps.org/pdf/TheRampProjectMinnesota.pdf>

The Minnesota Ramp Project provides information on building ramps, including safety tips and potential funding sources. The How to Build Wheelchair Ramps for Homes manual of design and construction for modular wheelchair ramps is available for purchase or free download from the site.

Moriarty, Troyer, and Malloy Law Firm: Making Reasonable Modifications and Accommodations for Residents with Disabilities: What Does the Law Require and How Can Condo Associations Avoid Violating It

<https://www.lawmtm.com/reasonable-modifications-accommodations-residents-disabilities.html>

National Council on Aging and USC Leonard Davis School of Gerontology: Funding Sources for Home Modification

[https://homemods.org/wp-](https://homemods.org/wp-content/uploads/2019/05/HomeMod_Funding_Sources_Grid.pdf)

[content/uploads/2019/05/HomeMod_Funding_Sources_Grid.pdf](https://homemods.org/wp-content/uploads/2019/05/HomeMod_Funding_Sources_Grid.pdf)

National Resource Center on Supportive Housing and Home Modification (NRCSHHM)

<https://homemods.org/>

USC Andrus Gerontology Center

3715 McClintock Avenue

Los Angeles, CA 90089

Phone: 213-740-1364

NRCSHHM is based at the University of Southern California’s Ethel Percy Andrus Gerontology Center. The Center’s mission is to make supportive housing and home modification a more integral component of successful aging, long-term care, preventive health, and the development of elder-friendly communities. The site includes the National Directory of Home Modification and Repair Resources, a newsletter, a library and links to other organizations. It offers training and education opportunities for professionals who wish to respond to the increasing demand for home modification services. It also serves as an information clearinghouse on home modification to equip professionals and consumers.

Over the Rainbow Association

<https://www.otrhousing.org/>

Phone: 847-328-6633

An Illinois not-for-profit association dedicated to providing independent living solutions and employment opportunities for individuals with physical disabilities.

Paralyzed Veterans of America – Architecture & Accessible Design Program

<https://pva.org/research-resources/accessible-design/>

PVA Architecture has on-staff architects that provide design assistance to veterans. For more information regarding home alterations, you can purchase their Accessible Home Design: Architectural Solutions for the Wheelchair User book (<https://pva.org/research-resources/accessible-design/accessible-home-design-book/>). This book contains a comprehensive discussion of accessible home as well as methods for designing, financing, and constructing your residential project. The scope of projects ranges from small homeowner additions to large multi-family communities.

RAMPS.org

<https://www.ramps.org/free-ramps.htm>

Provides information and resources about ramps.

RAMPS Across America

<http://rampsacrossamerica.org/>

Phone: 757-327-0696

Ramps Across America’s mission is to provide individuals with mobility restrictions a safe ramp for their home. Volunteers provide free design and construction.

Rebuilding Together

<https://rebuildingtogether.org/>

999 N. Capitol St. NE, Suite 330

Washington D.C. 20002

Phone: 800-473-4229, 202-518-3100

Rebuilding Together provides free home modifications and repairs to make homes safer, more accessible, and more energy efficient.

Research & Training Center on Independent Living

<https://rtcil.org/home-visitability>

The University of Kansas
4089 Dole Center
1000 Sunnyside Ave.
Lawrence, KS 66045-7561
Phone: 785-864-4095
Email: rtcil@ku.edu

The University of Kansas offers a free downloadable publication called Making Homes Visitable: A Guide for Wheelchair Users and Hosts:

<https://rtcil.org/sites/rtcil.drupal.ku.edu/files/docs/Making%20Homes%20Visitable%20with%20TAGS.pdf>.

United States Access Board

<https://www.access-board.gov/>

An independent federal agency devoted to accessibility for people with disabilities. The board develops and enforces accessibility requirements for the built environment, transit vehicles, telecommunications equipment, and for electronic and information technology.

USA.gov: Housing Help

<https://www.usa.gov/housing-help-audiences>

Visitability (formerly Concrete Change)

<https://visitability.org/>

600 Dancing Fox Road
Decatur, GA 30032
Phone: 404-378-7455

An international network that advocates for making all new homes accessible.

Publications

Administration for Community Living: Home Modifications Fact Sheet (April 2009)

https://acl.gov/sites/default/files/news%202017-03/Home_Modification.pdf

This fact sheet provides information on home modifications, including how to evaluate homes for needed changes, and financing options.

Metropolitan Center for Independent Living: How to Build Ramps for Home Accessibility. Fourth Edition.

<http://www.wheelchairramp.org/rampman/manual/rampindx.htm>

See <http://www.wheelchairramp.org/rampman/manual/ramp65.htm> for order form.

New Mobility: Paying for Home Access Modifications, August 2017.

<http://newmobility.com/paying-home-access-modifications/>

Videos

Northwest Regional SCI System: Home Adaptations and Modifications after Spinal

Cord Injury

https://sci.washington.edu/info/forums/reports/home_mod_07.asp

Video of June 12, 2007 presentation by Pam Stockman, Occupational Therapist, University of Washington Medical Center.

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