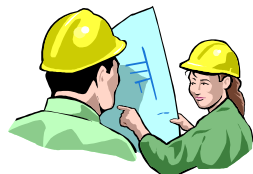




EWI helping designers build for an aging population

by Lorel Cook, Executive Assistant, EWI Works, Edmonton, AB



Always on the lookout for new opportunities in our field, EWI Works is now assisting new home and condominium builders in the design of living spaces to meet the specific needs of seniors or individuals with disabilities. Designers can now utilize our knowledge of ergonomics and the aging to make homes that are user friendly for this particular segment of the population.

To illustrate, most of us conduct simple tasks, such as turning on a kitchen tap, with ease. While layouts, fixtures and appliances may vary aesthetically, most are designed to comfortably suit the average individual. However, we are not all average and our vision, strength and mobility often change as we age. Therefore, these simple tasks are more difficult for someone who is restricted to a wheelchair, or has a weakened grip.

As our aging population grows, the demand increases for living environments that adapt to our changing physical needs and allow for greater ease-of-use, comfort and freedom. Therein lies the challenge for designers, new homebuilders and renovators. Understanding how to create these unique living spaces requires someone who can provide sound advice in the area of ergonomics and environmental design in relation to the aging.

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Selecting new uniforms: The value of Employee Involvement

by Donald B. MacDonald, Ergonomics Consultant, EWI Works, Calgary, AB

Over half the working population use work clothing of some form. There are various methods that organizations can use to involve employees in the selection of new uniforms. Many workplaces merely ask employees what size of uniform they need. In others, employees take on a more active role in the selection of new uniforms. Utilizing employee involvement in the selection of new uniforms benefits everyone.

The uniform makes the employee

Clothing has functional values, such as comfort and protection or security. It also has symbolic properties, which include: self-esteem, state of mind, group membership, decoration, fashion and respectability. These are all important considerations when selecting a new uniform for your workforce.

An important first step in selecting new uniforms is to get input from all groups concerned. This would include: employees from all areas of the workplace; health & safety personnel; laundry-room staff (if uniforms are washed on site); union officials; and management. Each of these groups likely has different characteristics they want the new uniform to have. After gathering individual input, a smaller committee representing a member from each group should then create a detailed specification for the new uniform.

The garment specification is the wish list of characteristics to be used when looking for a new uniform.

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EWI Helps Builders (Cont.)

MBI Miller Bros. Inc., a local adult condominium builder, could see the importance in building a complex that provided functional independence for those who needed homes custom suited to their changing abilities. The construction company enlisted EWI Works to assist them in their adult condominium projects.

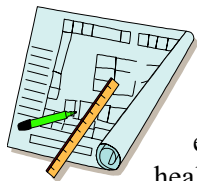


Miller Bros. Assisted Living Complex.

“It’s an excellent opportunity,” Linda Miller, ergonomic consultant and owner of EWI Works said enthusiastically. “It’s taking both the field

of ergonomics and the business of adult home building in a whole new direction.”

Miller, who holds a Masters Degree in Environmental Design from the University of Calgary, also believes in the value of the assisted living concept and is putting her 10+ years of experience hard at work. From working with architects to researching household appliances and products designed with the elderly in mind, the process requires



If you’re not considering a move just yet, you can make modifications to an existing home to accommodate changes in health and abilities. The following tips are adapted from the American Association of

Registered Occupational Therapists’ publication, “*Occupational Therapy, Skills for the job of living.*”

Bathroom Modifications:

Toilet:

Replace the toilet with a higher model with an elongated seat. This design is helpful to taller people, wheelchair users, and those with limited hip movement.

Consider a raised toilet seat and grab bars near the toilet. This allows greater ease and security in getting on and off the toilet for those with weakness, decreased energy or balance problems.

Tub or shower:

Make the tub more user friendly with a hand held shower, larger bath controls, and grab bars around the tub and shower wall. Also consider a bathtub seat or shower seat.

her consultation from the initial stages to the end product.

Still, this process does not stop with just layout and appliance considerations. Providing mobility, fitness facilities, social interaction and healthy meals is also part of improving quality of life for seniors. “It’s not just about installing bathtub faucets and kitchen stoves modified to help those with arthritis or vision problems,” says Miller. “It’s about lifestyle. Our goal is to build a complex with convenient amenities that allow the elderly to be able to live active, independent lives within their own familiar community.”

Statistics prove that our aging population is rising. Seniors are living longer, healthier and active lives and desire homes that provide comfort and freedom, adapted to the physical changes in their abilities. EWI Works is educated and experienced in understanding the aging individual, the processes, and how to provide correct design specifications that consider these changes. If you are an architect or developer who understands this trend and would like EWI to assist you, please contact us at (780) 436-0024 or by email at info@ewiworks.com.

Modifying your home for future needs

Install non-slip strips or a rubber mat on the floor of the tub or shower and consider installing a bathtub or shower seat. This will help to reduce the risk of falling.

Install lever faucets in the sink, tub and shower to aid those with a weaker grip.

Other fixtures:

Floors should have a non-slip, non-glare surface to increase safety when walking, using a cane or walker. It also helps those with low vision or balance problems.

Sinks, counter tops, and cabinets can be lowered for those who must remain seated or use a wheelchair.

Lighting should include adequate wattage. A light above the tub provides a clear view of tub edges and items used in the bathtub.

Install a rocker light or a motion sensor light switch at an appropriate height to help those with weak or limited finger movement to turn the lights on and off.

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Selecting new uniforms (cont.)

Some important items that should be considered in the specification include:

- Sizes that must be available.
- Characteristics of the material (cotton, polyester,
- Number of pockets (if any).
- Fastening requirements (zippers, buttons, etc).
- Washing criteria (wash for 60 minutes at 71°C).
- Colors required.

Companies can provide you with a suitable garment from their current designs or they may have to design one to specifically meet your criteria.



Take the product for a test drive

The next step is to have employees test the designs while working, preferably for a full shift, to identify positive and negative aspects of the design. Ensure that clothing companies provide you with samples by specifying it as part of the tendering process.

Coordinating people to trial the uniforms takes time, but there are no extra costs for employees to trial the uniforms. It takes as few as 5 people to identify 80% of the design issues. However, if time permits, it is preferred to have more than 5 people trial the uniforms.

Benefits of having employees trial potential uniforms include:

- Employee morale improves as a result of being involved in the process.
- It allows you to test your garment specification, and change if necessary.
- It allows you to select a uniform that meets employees' needs.
- Getting the right uniform the first time saves money.

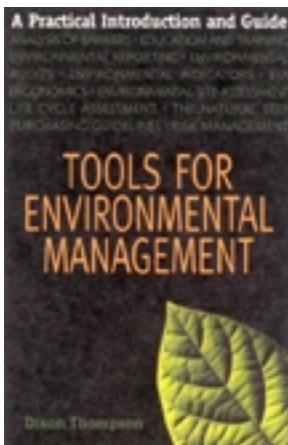
And the award goes to....



Once the trials are completed, and information is collected and summarized, a decision can be made. It is possible that there will be one uniform that clearly comes out on top, and you select it without making changes. Sometimes you may need to change the specification because the trials have shown a problem with a certain feature. Whether changes are required or not, your employees will appreciate their involvement, and you will feel more confident that you have the right uniform for the job!

Donald holds a Masters in Ergonomics from Loughborough University in the UK where his thesis work involved conducting user field trials of nursing uniforms at Nottingham City Hospital. Prior to joining EWL, he was an ergonomist with the Nova Scotia Department of Education, providing physical accommodations for students with disabilities.

Tools for Environmental Management by Dixon Thompson



As international organizations across various industries enter the last half of this decade, they will experience an increasing demand to not only understand environmental principles and concepts but also how to implement solutions to meet developing regulations and policies. From New Society Publishers comes Tools for Environmental Management, a comprehensive guide for

organizations, providing an overview of Environmental Management Systems and 22 environmental management tools as well as practical applications that can be applied globally.

“Tools” is the brainchild of Dixon Thompson, Professor of Environmental Science at the University of Calgary. In addition to teaching environmental science and environmental management for 30 years, Thompson has hands-on experience in environmental management, working as a

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Tools for Environmental Management

consultant in the field. Thompson also brings together 15 other co-authors with diverse disciplines and experiences to share their knowledge, providing industries with an array of tools and methods to work towards improving the practice of environmental science and management.

Understandable and straightforward, Tools for Environmental Management will appeal to industry and environmental professionals as well as students in the environmental discipline, providing a foundation to prepare a more proactive approach for effective implementation. Along with examples and valuable references to resource, “Tools” lists websites to allow the reader to keep current on developing issues and solutions.

Ordering Information:

Tools for Environmental Management is available for \$37.95 US or \$54.95 Canadian plus shipping through New Society Publishers. You can contact New Society Publishers at (800) 567-6722 or visit their website at www.newsociety.com. EWI Works also has order forms available from New Society Publishers. If you would like one sent to you, please contact us at (780) 436-0024 or by email at info@ewiworks.com.

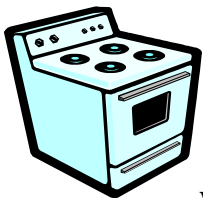
Certified Professional Ergonomists for proven results.

Modifying your home (cont.)

Kitchen and Bedroom Modifications:

Kitchen:

Install a large, lower, double sink with clearance underneath and single lever faucets. This will allow those with weakness, less energy, or wheelchair users to sit while working at the sink. The lever faucet allows those with arthritis or limited hand strength to use their palm to turn on the water.



Buy auto shut-off appliances or ones with control knobs on the front with large-print controls and directions. This will improve safety for those with limited vision and memory problems.

Install lever handles on all doors and a jar opener under the cupboard to open doors and jars easily.

Bedroom:

Install pull-out shelves and lower cabinets to allow easy access for wheelchair users or those with limited reach. Also, install adjustable closet shelving and an adjustable closet bar.

Decrease the height of the bed to make it easier to get in and out of bed.

Install a rocker light or a motion sensor light switch at an appropriate height to assist those with weak or limited finger movement to turn the lights on and off.



Ensure that the floor is uncluttered by clearing pathways and avoiding loose scatter rugs. A short pile carpet or hard floor surface allows those using canes, walkers, or wheelchairs easier movement.

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