The University of Sydney
Faculties of Health Sciences and Architecture
The Home Modification: Information Clearinghouse Project

NEWSLETTER

www.homemods.info

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Our stated mission is "to develop a leading edge Home Modification information clearing project designed with the assistance of, and accessible to, the full range of industry and consumer target groups."

Home Smoke Alarms: Hard Wired and Battery-Powered Systems

By Tanja von Behrens

Between July 1996 and June 2004, 412 people were killed in 366 Australian residential fires. Of these, 55% (of those with available details) had no smoke alarms installed at all - while 31% of those with smoke alarms installed had non-working alarms. To counter such figures, the NSW Parliament passed a Building Legislation Amendment (Smoke Alarms) Bill in 2005 that requires all NSW residential dwellings to be protected by battery operated or hard-wired smoke alarms by May 1 2006 (Parliament of NSW, 2005). In addition, all Queensland homes either built or predominantly modified after 1997 must have a hard wired alarm installed and, as of July 1 2007, all QLD residential properties must have a minimum of one battery-powered smoke alarm. All smoke alarms used for the above must be approved or accredited to Australian Standard AS 3786 (Standards Australia, 1993) or listed by the Scientific Services Laboratory.

Home smoke alarms contain in-built alarms, designed to sound when smoke is detected in the environment, alerting those in the near vicinity to the existence of a fire and signaling the need for escape. Hard-wired (or mains powered) smoke alarm systems are connected to the homes main power supply and backed up by batteries - as opposed to the stand alone alarms that operate using only 9V battery power. Hard-wired alarms may be connected together so that they are activated simultaneously, and must be installed by a qualified electrician. The main advantage of hard-wired systems is that as long as the power supply is connected the smoke alarms will be sure to operate - sounding in all areas of the home. They will also indicate if the battery is removed or the unit dismantled.

Both the hard wired and battery-powered smoke alarms, and the technologies they use, have advantages and disadvantages, and their appropriateness should be considered with regard to smoke alarm placement, the household's abilities and mobility and accessibility restrictions. In addition, those with disabilities must also consider how appropriate an audio signaling device may be for their particular disability - perhaps instead choosing a visual alert or vibrating alarm from a specialist retailer such as www.brooks.com.au.

To aid therapists, consumers and industry members to understand the differences between hard wired and battery-powered alarms, and the major types of smoke detection available, HMinfo have put together the 'Home Smoke Alarms: Hard-Wired and Battery-powered Systems' Summary Bulletin. This bulletin contains diagrams and explanations of the various smoke detection mechanisms, suggestions for possible smoke alarm placement in different building classes, product supplier information and a checklist for individuals and therapists to ensure that smoke alarms are appropriately placed, installed and maintained.

This bulletin is available from the HMinfo website under 'resource library' then 'occasional research papers.'

NSW Fire Brigade. (2006a). Power Supply Sources [Electronic Version]. Retrieved June 20 2006 from http://www.nswfb.nsw.gov.au/community/athome/smokealarms/type_sources.php.

NSW Fire Brigade. (2006b). Smoke Alarm Types [Electronic Version]. Retrieved 26.6.2006 from http://www.nswfb.nsw.gov.au/community/athome/smokealarms/type_detection.php.

NSW Fire Brigades. SABRE Program - Smoke Alarm Battery Replacement for the Elderly. Creating a safer, more confident community. (pp. 6).

Parliament of NSW. (2005). *Building Legislation Amendment (Smoke Alarms) Bill* Retrieved 21.6.2006. from http://plan.arch.usyd.edu.au/hmm/learn/filelib/getfile.cfm?filename=smokealarmlegislation.

Standards Australia. (1993). Australian Standard - Smoke Alarms (Vol. AS 3786-1993 - Am.1, 2, 3, 4, pp. 1-19): Standards Australia Online.

Standards Australia. (2006). Automatic Fire Detection and Alarm Systems: Part 11 - Visual Warning Devices (Vol. AS 1603.11, pp. 1-26): Standards Australia International.

Featured Web Site: Care Design - Kitchens

www.caredesign.com.au/Kitchens/default.aspx

By Lara Oram

Care Design is a division of the manufacturer Enware, which aims to provide many bathroom, kitchen, household and workplace product solutions for the elderly and people with a disability. The company also provides occupational therapy consultancy and CAD design.

The kitchen webpage on the Care Design website, in particular, provides many good resources for kitchen layouts, spatial requirements and workstation and storage ideas. The webpage provides a link to the Pressalit Care Guide to Kitchen Planning. This is a very comprehensive resource and a great tool for consumers who are looking at building or modifying a kitchen. The design is so flexible that it is universal, enabling wheelchair users to undertake many kitchen activities independently.

One of the latest kitchen products they are advertising is the Indivo Kitchen which has an electronic bracket system for bench tops and cupboards, enabling them to be height adjustable for both seated and standing users.

Whitegoods such as refrigerators and dishwashers can be mounted on height adjustable plinths so that they are at a more reachable height.

Flexible kitchen units enable the layout to be modified for different users and maintain the under bench space for seated users.

To access the Guide to Kitchen Design and other resources go to the brochure link at the bottom of the kitchen webpage http://www.caredesign.com.au/Kitchens/default.aspx

Latest Events & Training

- National Forum on Universal Housing Design – 8th Nov
- OH&S Consultation – 7th, 10th Nov
- HMinfo Advisory Committee Meeting – 23rd Nov
- NSW HMMS State council AGM – 4th Dec
- NSW HMMS State Council Meeting – 5th Dec

Publication Review: Moisture-Resistant Homes

A Best Practice Guide and Plan Review Tool for Builders and Designers

With a Supplement Guide for Homeowners

By the U.S Department of Housing and Urban Development, Office of Policy Development and Research

By Lara Oram

This guide provides best practice recommendations for the design, building and maintenance of moisture resistant homes. It aims to reduce moisture problems such as rain penetration, structural decay, mold growth, high indoor humidity, condensation, etc. The book is divided into design, construction and management phases for quick referencing and for the different users of the guide. Although published in the United States, this guide provides general principles for moisture prevention and management that can be applied globally.

The Planning and Design section provides best practices for roofs, walls, foundations and vapour control. Geographical regions are even considered where humidity and rainfall are higher, causing more moisture concerns. Although technical in terminology, this section provides many diagrams and basic illustrations so that lay persons are informed of best building practices.

The Construction section encourages jobsite quality management by providing a checklist of moisture resistant practices to cross reference with during the actual construction of the building. For example, before framing, inspect that the wood has been appropriately treated.

The Homeowner Guide at the back of the book provides really practical water management and damage prevention tips for each area of the home. For example, the bathroom area lists checkup tips in relation to the plumbing, exhaust fan, toilet, windows, showers and bathtubs. For a homeowner who is uneducated in building requirements, this resource is really comprehensive and user-friendly.

It is important to consider how modifying areas of the home may impact upon water management. For example, if the landscape grades have been modified to install flat paths or bridges for access, has water drainage been considered? If a wall has been reinforced to install a grabrail, has the wall been waterproofed? If moisture barriers are affected, the health of the household and the soundness of the construction may be at risk – this should not be taken lightly.

To obtain a copy of this guide, visit the U.S Department of Housing and Urban Development website at http://www.huduser.org/publications/destech/moisturehomes.html

Latest Publications:

- Home Smoke Alarms – Hard-wired and Battery-Powered Systems: Summary Bulletin
- Orientation: Consumer and Industry Factsheets: Effectiveness of Grabrail Orientations During the Sit-to-Stand Transfer
- Dementia Design Guidelines: Home and Community Care Capital Works Program

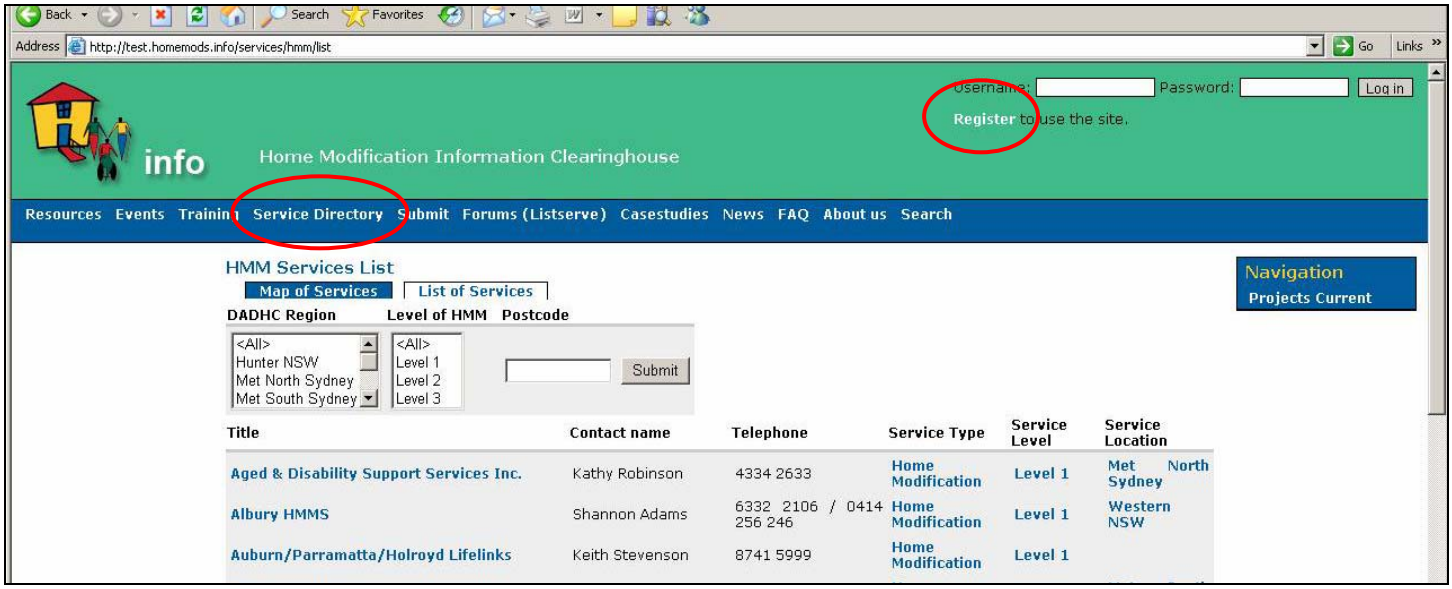
Upcoming Publications:

- Modification or Relocation: Summary Bulletin
- Understanding Aboriginal Communities: Summary Bulletin

***Go to the Resource Library to view these publications**

To the HMMS Coordinators…

All coordinators need to register to the new HMinfo website to ensure the HMMS details are correct. If not yourself, a staff member from your service needs to be assigned to update the contact details of your service on the website. The staff member needs to register to the website and then email us for editing privileges to their service. The website address is still www.homemods.info. If you aren't taken to the new website automatically, click on the homepage news item titled: *Link to Beta Version of HMinfo Redesigned Website -With Complete List of News.* Click on the register button in the top right hand corner of the homepage. Once registered, email hmminfo@fhs.usyd.edu.au and request editing privileges to your service. Once HMinfo notifies you of your access, go to 'Service Directory; HMM Services; List of Services'. Open up your service details by clicking on the name of your service. The 'edit' tab is underneath your service name. Edit any new details and then click on 'submit'. If the 'edit' tab does not display, contact the HMinfo team with your username.



How to contact us

Home Modification Information Clearinghouse
Faculty of Health Sciences
East St,
PO Box 170
Lidcombe, NSW 1825

Phone: 612 9351-9215
Fax: 612 9351-9197
Email: hmminfo@fhs.usyd.edu.au
Website: www.homemods.info

HMinfo Background

Our team brings together a range of experience. The Directors are Catherine Bridge from School of Occupation and Leisure Science, Faculty of Health Sciences, The University of Sydney and Peter Phibbs from the Urban Research Centre, University of Western Sydney. Katrina is our librarian. Lara, Lisa, Stephanie, Tanja and Brian are the research assistants. Andrew and Gordon are our web programmers.

Editor: Lara Oram