## the AFRDI bulletin Journal of th and Develor Furn

March 2011

Journal of the Australasian Furnishing Research and Development Institute Limited trading as Furntech **www.furntech.org.au** 



## Fine tuning the broader concepts of sustainability – a long and difficult road to travel

As the world grapples with the need to reduce waste in all its forms, and to produce manufactured goods in a sustainable manner, good ideas come and go with considerable rapidity. Such is the nature of trying to come to terms with sustainability – a subject which is proving to be exceedingly complex and difficult to tackle in conventional business terms.

It's only 18 months since the world's largest retailer, Walmart, announced it intended to launch a wide-ranging Sustainability Index, with the aim 'to establish a single source of data for evaluating the sustainability of products.' The enormity of the project can be gauged by the fact Walmart has more than 100-thousand suppliers.

Walmart announced it would introduce the initiative in three phases, ultimately hoping to translate data into a simple rating tool for consumers about the sustainability of goods. (some other organisations already have achieved this, with a limited range of product ratings accessible via mobile phone applications, to enable point of sale sustainability comparisons.)

Internationally, critics are saying that Walmart's focus on sustainability, even if it has not yet attained its stated goals, has achieved something possibly of far greater worth – it has brought the question of sustainability out of the periphery of the marketplace and into the mainstream of business, as a core activity for the future.

Last issue, we noted some wise words from the MIT Sloan Review of Management: 'Sustainability is less a target than an approach, which is why it is continually being refined'. More recently, the Review quotes at length Marvin Odum, president of Shell Oil.

"Safety is a core value for people in Shell, and if it's not, you don't last very long. We're seeing the same thing start to develop with sustainability issues. We want that as a core value.

"Sustainability's clearly a priority, but it's not enough for it to be a priority. Priorities change with conditions, they change with financial performance and maybe the economy. Core values don't. And that's the way I want people to think about sustainability. It's core."



Australasian Furnishing Research & Development Institute Limited ABN 44 009 579 908. trading as Furntech School Road (University Campus) Newnham Drive PO Box 2042 Launceston Tasmania 7250 Australia Tel (03) 6326 6155 Fax (03) 6326 3090 Website: www.furntech.org.au Email: info@furntech.org.au

Standards, Testing and Product Certification for Commercial, Domestic and Nursery Furniture in Australia and New Zealand

## Use of Furntech-AFRDI logos

The AFRDI Board recently reviewed policy on use of company logos, reflecting significant developments in the range of available marketing tools (e.g. websites, electronic catalogues etc).

AFRDI sees the revision as allowing more opportunities to use the logos, providing necessary criteria are met.

If you are unsure about their correct use please contact AFRDI on (03) 6326 6155 or at info@furntech.org.au

#### **Product Logos**

AFRDI Blue Tick, AFRDI Green Tick, the Furntech Orange Tick and the AFRDI 146 Leather logos are only to be used appropriately and in a manner which is neither intentionally or unintentionally misleading.\*

#### Examples of acceptable uses are as follows:

1. Adjacent to **products** that hold current, relevant AFRDI certification. Companies whose products satisfy these requirements enter into legal agreements with the Institute.

2. When used as a 'link' in a webpage or brochure. The logo must be accompanied by a reasonable explanation of its purpose e.g. "follow this link to find our AFRDI certified product range" or " look for this logo next to AFRDI certified products". Use in this way should only be made by companies with currently certified products.

3. Other uses as explicitly deemed appropriate by AFRDI. The principle applied in determining unacceptability will be "would a reasonable person be likely to infer product certification where none exists?" An example of logo use in apparent conflict with clause 2 above, but likely to be considered appropriate by AFRDI, would be when a logo is used by a specifier on a tender document (including an appropriate description of what the certification scheme means). In this case the specifier is unlikely to be representing a company with 'currently certified products'. However, given this type of use is clearly not implying certification where none exists, it would typically be deemed appropriate. Please contact us for further advice.

#### Examples of unacceptable use :

1. On covers of brochures, letterheads or website home (or other) pages to indicate, in a commercial sense, that **some** of the products contained therein are certified when no clear distinction is made between those products which are certified and those which are not.

2. On items of correspondence like letterheads, facsimiles, brochures and web pages where it is used without appropriate description, or does not serve a linking function (as outlined previously), or is used by companies without current certified product.

3. Adjacent to any product which is not currently certified by the Institute.

As a point of clarification, if a product having once been approved is renamed, it still requires separate approval from Furntech-AFRDI to be advertised with any of these logos under its new name. (Explanation: an office chair, for example, has a named identity when tested, the name encapsulating all the mechanical components which make up the chair. If the name is changed, or the chair is re-badged for marketing reasons by a third party, it is difficult for a consumer (or AFRDI) to check that it is the same chair originally tested and certified by AFRDI – the result being the purpose of the certification has been effectively lost. Furntech-AFRDI believes consumers and specifiers should be able to check on a product's certification status by visiting the Furntech webpage www.furntech.org.au).

Furntech-AFRDI wishes to encourage the use of its logos to promote certification but it must be done properly. We must also protect the integrity of our certification programs and those clients who use our logos according to the conditions detailed in this policy and in our certification agreements.

#### Member Logo

This is available to all financial Institute members and may be used on items of correspondence like letterheads and facsimiles, on brochures and Web pages but **not** on products. Members will be sent the Member logo in electronic form on request.

\*The Trade Practices Act makes no distinction between cases where misleading behaviour is intentional or inadvertent. The issue is whether the consumer would be mislead by the behaviour.

## Design is a critical part of recovery in our industry...and AFRDI can play a role

by Bob Panitzki, CEO Furntech-AFRDI

The British Design Council recently examined how Britain must act to recover from the Global Financial Crisis, and more importantly, how the country's industrial base must change its thinking to compete successfully against off-shoring.

Not surprisingly (from the Design Council's standpoint anyway), a major part of the answer lies in harnessing the inherent strength of the design knowledge base within the country.

The British report puts the position that the country is going to have to innovate to make its living – the mere act of manufacturing will not be sufficient in a world where such activities increasingly will find their way to low-cost countries. The Design Council says successful companies of the future will be those which develop innovative products and processes, so creating new markets and reputations.

It goes on to say that the boundaries between manufacturing and services are dissolving. A truly modern manufacturing company now has to keep an eye on the soft or intangible side of its offer – the best companies are becoming what it calls manuservice companies – businesses which have developed strong service portfolios on top of their traditional product offerings.

At AFRDI, we're inclined to think that Australian furniture companies may also need to re-examine from time to time where they're heading as the process of economic recovery begins.

#### In-house design now possible at AFRDI

In our own small way at AFRDI , we are practising what we preach – we have designed and installed new machines better reflecting current technology, and that process has been assisted because we now have our own industrial designer on staff.

All of which brings me to another point. Why is it that Australian furniture manufacturers seem so reluctant to invest in new product and design? The Australian government supports this activity through its Research and Development taxation concessions, and AFRDI is a Registered Research Agency. In practical terms, this means that even small amounts of investment will attract a tax rebate, rather than the relatively large amounts that need to be spent if a company does research in its own right.

Because we have been in the business of testing a broad range of furniture for several decades, our staff has unparalleled practical experience in knowing what works and what is likely to fail. Moreover, we can give advice on engineering and production problems. Incidentally, Australia spends only around 1.3% of GDP on R&D, less than half the amount Japan invests, and only a fraction of the 4.5% Israel spends.

Nearly a decade ago, a report by Monash University commented on the failure at that time of Australian industry to capitalise on opportunities in the new knowledge-based economy. The report spoke of weak investment, halting commitment, and what it called a fatal preoccupation with defining efficiency only in terms of cost-cutting. What has changed in the intervening years? It would seem that some sectors of our industry are using the excuse of the GFC to justify adherence to old orthodoxies, coupled with an unwillingness to research and develop new products .

If Australia's furniture industry is to survive long-term, design for local conditions must play a considerable, perhaps even central part. It is possible that in our field of furniture, local regulations on recycling and sustainability may in the future make it harder to source compliant furniture from overseas, opening up opportunities for at least a limited increase in local manufacture again.

AFRDI stands ready to assist in this process.

# Single law for all Australian business introduced in 2011

All Australian businesses – wherever trading in Australia – are to operate under a single, national consumer law: the Australian Consumer Law (ACL).

The ACL, effective from January 1 2011, replaces different national, state and territory laws that set out consumer rights and business obligations when selling goods and services with a single, national set of rules.

The ACL is a national consumer law which applies to all business sectors. It covers general standards of business conduct, prohibits harmful practices, regulates specific types of business-to-consumer transactions, provides basic consumer rights for goods and services and regulates the safety of consumer products and product-related services.

Further details can be accessed at the following address:

http://www.consumerlaw.gov.au/content/Content.aspx?doc=businesses\_ACL.htm

## AFRDI warns on use of older cots and cribs in wake of US product ban

The United States Consumer Product Safety Commission (CPSC) has outlawed dropside cribs, blaming them for the deaths of at least 32 infants over the past decade, and implicating the design in the deaths of a further 14 infants.

The move to outlaw the cribs comes after more than nine million units have been the subject of recalls during the past five years. The new standard takes effect in June. It mandates tougher safety testing which more closely mimics the actions of children as they get older, such as shaking the crib, running and jumping up `and down in it.

While the ban applies to the sale of new cribs, the CPSC says parents and caregivers should check to make sure that the drop side or any other moving parts in older units operate smoothly. In particular, it warns that checks should be made in case the sides or corners of cribs start to separate, creating a gap that has the potential to entrap a child.

AFRDI's team leader in charge of cot and bunk bed testing, Lee Bowkett, says the concerns expressed by the CPSC are also relevant to Australia.

"Cots, regardless of their age, should be regularly checked for loosening of components, for any damage, and in particular, a lack of functionality of the dropside.

"It is easy for joints in the dropside to work loose as the glue ages, turning the cot into a potential injury trap for youngsters."

In some states, all cots in childcare centres and similar institutions must comply with AS/NZS 2172:2010.

#### Closer links between US and Australia on consumer product safety

Consumers in Australia and the United States will benefit from improved consumer product safety protection with the signing of a Memorandum of Understanding between the Australian Competition and Consumer Commission and the United States Consumer Product Safety Commission.

The two bodies say the agreement reflects an intention to work more closely together on product safety issues, including coordinating the assessment of product safety risks that are common to both countries.

#### ACCC enforces clearer labeling for 'leather look' furniture

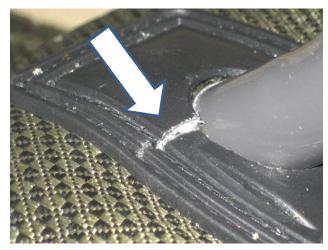
Following intervention by the Australian Competition and Consumer Commission, Fantastic Furniture must now promote furniture covered with 'leather look' synthetic fabric, or upholstery containing only some leather fibres, in a way to make it clear the products are not leather. The ACCC considers that between November 2009 and June last year Fantastic Furniture engaged in false, misleading or deceptive conduct by representing that certain lounge furniture promoted in catalogues, on television, and on the company's website, were either wholly or predominantly upholstered in leather when they were not. ACCC chairman Graeme Samuel said his organisation would not tolerate traders in the furniture or any other industry misrepresenting predominantly synthetic materials as leather.

### There's still time to go fishing and camping!

Being that time of the year, many of us are still heading off to the beach or the bush for a wellearned holiday break. In either case, the vacation often involves using folding seating – and rather than the canvas director's chairs from years past, a folding chair now usually is a contraption with many triangulated steel elements pinned together to support a hammock-style seat.

At AFRDI, we are sometimes a little sceptical when seemingly extravagant claims are made about the load ratings for these types of chairs. We have seen advertisements boldly claiming that a certain chair is rated to 200 kilos! Many so-called heavy duty office chairs do not have that kind of performance.

In the event, we set out to buy a representative upper mid-range chair, retailing in the \$50 – 70 range, and put it through an appropriate AFRDI testing regime.



#### The results were both positive and surprising, even though the test chair ultimately failed.

The first challenge facing the testing crew was to choose an appropriate test. Most of AFRDI's testing of chairs assesses such factors as the robustness of principal components – the castors, the base, the gas spring, the mechanism, and so on – as well as the chair as an entity to ensure it meets basic criteria for strength, potential longevity, and suitability for purpose.

The camping chair came with a heavy duty rating, and a ticket claiming it could stand use by people weighing 140 kilos. For the record, that's considerably more – 30 kilos more – than the nominal load rating which AFRDI gives adjustable height swivel office chairs under AS/NZS 4438 for Level 6 (commercial heavy duty) Blue Tick certification.

The subject chair was tested under a modified version of AFRDI 142, the AFRDI Rated Load Standard, initially under a load of 185 kilos for 30,000 cycles. It survived with little structural damage, apart from a small tear in the plastic reinforcement of the fabric (picture top right). In the next test, a load of 155 kilos was applied near the front edge of the seat, then in a subsequent test, the seat and back were tested simultaneously, with the back ultimately failing – after nearly 11,000 duty cycles - due to a plastic hinge breaking. A hinge at the rear of the seat also failed.



Despite the failures, AFRDI testing staff were surprised at the chair's performance. Tester Guy Manley said: "I really found it hard to imagine that a camping chair could be so strong. OK, it failed in the tests, but this is an accelerated wear testing regime, and the time the chair took to fail represents quite a lot of ordinary use, and by the equivalent of a very heavy man.

"As a designer myself, I've got quite a bit of admiration for the cost versus performance thinking which must have gone into its design and production."

Note: AFRDI staff bought the subject chair anonymously from a specialist camping store. The chair is available Australia-wide.

## Sustainability: it's on the radar, but not everybody is buying it

From the *MIT Sloan Management Review* comes a preview of the organisation's 2010 Sustainability and Innovation Survey, and the results have contradicted expectations that uptake of measures to improve sustainability would be at best slow.

The Sloan Review says many of the questions asked were designed to find out how managers and executives are making a business case for sustainability. Other questions were longitudinal, repeating questions asked in the 2009 survey to give a sense of what is changing in the understanding of sustainability, and its rate of adoption.

A few highlights:

Nearly half of those who have not yet developed a clear business case for sustainability are spending money on it anyway.
Forty-seven percent of those who are substantially outperforming their peers have developed a business case for sustainability.
Among lower performing companies, only thirty percent have developed a business case for sustainability.

•Fifty percent of North American companies have yet to try to develop a business case for sustainability efforts, compared to thirty percent in the Asia-Pacific region.

•Employees were considered the second most influential stakeholder group driving sustainability in the 2009 survey. In 2010, they dropped to tenth place

#### Canadian survey identifies growing consumer responsibility, but also entrenched resistance

The recently released 2009 survey into sustainable consumption has shown that consumers in Canada express a high degree of concern about environmental issues, and also recognize that their purchasing decisions have an environmental impact.

The survey also identifies the fact that despite this high degree of concern, environmental decisions are weighted less heavily in purchase decisions than product cost, durability and convenience.

However, Canadians – more than 1,000 were surveyed three times over a period of time to track any possible changing trends and attitudes – are split evenly on their willingness to pay more for an environmentally-friendly alternative product.

#### The report's authors frankly admit that this means that around half of the people surveyed would not be prepared to pay anything more for an environmental alternative.

While the Canadians make no claims that their findings would be replicated elsewhere, Australians may well identify with broad consumer groups identified during the survey:

Green to the core – roughly a quarter of the survey. These were consumers recognising the environmental impact of their daily activities. Generally female, older, and usually follow through their intentions to make environmentally friendly purchases.

**Green on the outside consumers** – just over half of those surveyed. These are people aware of their environmental impact, but having a hard time translating this awareness into positive action.

**Greenless consumers** – just over 20 per cent of the sample, they consistently weight environmental considerations as low in their purchasing decisions. This group tended to be younger and male.

#### **NEWS BRIEFS**

As the world continues to take greater heed of environmental problems, it's perhaps appropriate to reflect on a little-known piece of legislation in the state of California – Proposition 65: the Safe Drinking Water and Toxic Enforcement Act.

Basically, the legislation is intended to improve consumer health protection by requiring suppliers to label any products containing chemicals identified as being carcinogenic or having an adverse effect on development or reproductive health. Testing is not yet mandatory, but may become so where detailed information on certain chemicals in products is not yet known.

The British Satra testing organisation says manufacturers should check through their supply chain for safety of chemicals used, using the process as a mechanism to reduce exposure to harmful substances, and through this, reduce risk of ill health.

#### In the United States, the Consumer Product Safety Commission (CPSC) has introduced (mid-January) a publicly available consumer product safety information database.

The database will enable consumers to go online to file incident reports on products considered unsafe or potentially hazardous.

CPSC will make all information visible and searchable online by the public.

**In Australia, the ACCC** has taken proceedings against Fantastic Furniture, Spotlight and Smash over unlabelled bean bags.

The ACCC alleges the companies supplied bean bag covers that did not comply with the mandatory consumer product safety standard for bean bags. The matter will be heard in March.

## All plastic monobloc chairs appear equal, but some may be more equal than others

OK, it's a paraphrase from George Orwell's famous novella Animal Farm, but quite apt when it comes to the ubiquitous plastic chair. For while many of these chairs are to all intents and purposes similar, AFRDI's testing does reveal differences.

The integrity of even chairs for casual use is important. Who wants to spring up out of a chair only to find that the arms and legs fail catastrophically, so that you fall over backwards?

In testing, some chairs fail at the first application of the test representing downward loading on the arms. Other chairs **(see picture below)** start to develop visible stress lines indicating an imminent joint failure.



The Australian standard specifies a static loading of 90 kg per arm for domestic chairs and 100 kg for commercial level plastic monobloc chairs.

AFRDI testing officer Arch Robinson says: "It's long been known that pigmentation in plastic has the potential to adversely affect strength," Robinson says, "but only rarely is this so clearly shown."

#### The Australian Standard considers this factor by requiring colour validation for each colour used in a chair.

Arch Robinson cautions importers and distributors to carefully examine the section and wall thickness of chairs they may be considering for distribution in Australia. Testing to the **Australian Standard\*** is important and is a service able to be provided by AFRDI.

Above: stress crack develops on web between chair arm and seat base

Arch Robinson points to a recent test involving a monobloc chair which superficially resembled others of its kind, but in fact had legs which were smaller and thinner in section than usual, resulting in a chair which literally buckled and twisted as standard testing loads were applied.

"In the real world," Robinson says, "this was a chair which would throw its occupant to the ground – and they wouldn't need to be very big for that to happen, either."

His advice: examine chairs from unknown sources or unfamiliar manufacturers very carefully to ensure that there appears to be sufficient material – with no evidence of skimping.

Look for the AFRDI certification logo and if a stronger chair is required, select one marked for commercial use.



\*AS/NZS 3813 : 1998 Plastic Monobloc Chairs adopts the position that the life of a chair will depend on the application in which the product is used. The Standard imposes much more severe requirements on commercial level chairs. Domestic chairs should not be used in restaurants or other non-domestic applications.

On the question of colour validation, the Standard requires that an example of each model – preferably with the darkest pigment – be subjected to all of the tests set out in the Standard. Other chairs made from the same mould and varying only in colour need not be subjected to all the tests and can therefore be tested at a considerably reduced cost.