



Standards as agents of cultural change

from Bob Panitzki, CEO of AFRDI

Research and development of standards is one of AFRDI's core activities.

Many see standards as tools for assessing various characteristics of products, and as a vital part of product certification. But, as the commercial world becomes more complex, so too do standards, and the effects they have on a wide range of manufacturing and commercial activities are ever broadening.

AFRDI's new Standard 150, the Sustainability Standard for Commercial Furniture, was developed at the request of Australian manufacturers, keen to see the standard of manufacture lifted.

AFRDI 150 has the power to positively change the way furniture is made, with regard to pollution, efficient and ethical use of resources, energy conservation, reduced packaging and transport costs. The influence extends to the initial design process, so that in future, furniture will be designed to minimise diversity of material types, and reduce and simplify the number of fasteners to facilitate end-of-life recycling or refurbishment.

Because it is concerned with issues such as chain of custody over sourcing of wood, it also has the potential to influence resource management practices in countries that trade with Australia. In a similar way, compliance with the standard means that Australians will no longer buy products from countries which may exploit labour.

Since standards such as AFRDI 150 force real observance of strategies to reduce resource use and to cut pollution, governments and some commercial operations are keen to write the standard into their furniture procurement policy as a demonstration of their commitment to important principles.

The standard, which started out as a means of encouraging better manufacturing practice, it is hoped will also have the power to achieve cultural change.

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*Season's Greetings from everyone at Furntech-
AFRDI. Thanks for your business in 2009. We
look forward to working with you again in 2010.*

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Achieving cultural change in manufacturing through application of standards is nothing new. ANSI, the American National Standards Institute, signaled such a change three years ago.

ANSI shifted its focus from **standards as business** to **standards for business**.

At AFRDI, we are not quite the crusaders that our American friends appear to be, nevertheless we feel that the latent power of AFRDI 150 will express itself as an agent of positive change in the Australian furniture manufacturing industry.

We are continuing to develop standards, notably at present, rated load extensions to existing standards to enable us to test and certify chairs at elevated load levels, far in excess of the general 110kg limit used in most existing standards.

We feel this is important work. In a world where litigation frequently follows personal injury, it will pay for commercial and government furniture users to have chairs for their larger staff members properly assessed, so that failure should be a rare occurrence indeed.

See: **And another thing...** page 5

GET BIG DISCOUNTS

AFRDI offers generous discounts on multiple testing...and it's easy to rack up big savings!

Similar items submitted at the same time from the same company for testing to the full standard attract **33% off for the third and subsequent items**.

This is in addition to member discounts of 20% .

DO THE SUMS!!!



V Rocker recalled

One of the more unusual product recalls, The V Rocker sound chair, recalled by Target Australia after it was found to contain "possible contaminated organic matter embedded in the chair." Target has offered either a refund or a raincheck on an improved model.

In other product recalls, bunk beds continue to feature, through failure to meet relevant consumer product safety standards:

- Linksea has recalled the Snow Bunk Bed model LS-001
- Ane Furniture has recalled the Menzies Bunk
- Ane has also recalled the Marina Bunk Bed

All the recalls relate to potential entrapment hazards. Other product recalls include the Oeuf Baby Lounger, recalled by 3 Feet High, because of a possible failure in its metal frame.

Also recalled is the Worwo Baby Car Seat, sold through eBay using the supplier name Doreen 3058. The seat was supplied without an upper tether anchorage strap.

ACCC critical of common pricing ploy

The ACCC has raised concerns that recommended prices used in some furniture advertising are not genuine.

It has forced Yarrabee Investments Pty Ltd to stop what the ACCC calls false and misleading price advertisements on its bedding products. Yarrabee has two retail stores in Victoria – Leather Lounges Direct and Dekabu Leather.

In newspaper advertisements and on its website, the company used price comparisons such as 'Recommended Retail \$4989 Now Only \$999'.

The ACCC raised concerns that the recommended retail prices asserted by Yarrabee Investments were not genuine prices. Yarrabee has now acknowledged that it had no foundation for the particular recommended retail price.

ACCC chairman Graeme Samuel said: "Comparison pricing is a strong marketing tool used by consumers to not only judge the value of a represented savings but, as in the case of bedding, the higher price may also be taken by consumers to be indicative of the quality and features of a particular bed.

"Retailers referring to a product's recommended price can not merely make that price up themselves."

Mr Samuel added that retailers must not promote or offer goods for sale using comparative price representations (other than using RRP) unless those goods had been offered for sale or sold at the higher price in reasonable quantities for a reasonable amount of time prior to the commencement of the promotion offer.

Colour fastness on drum grained leather

LASRA, the Leather and Shoe Research Association of New Zealand, does a great deal of testing of upholstery leather for AFRDI and, of course, some trends emerge.

LASRA's Geoff Holmes remarks that from the hundreds of tests done, they've been noticing an anomaly when it comes to wet rub fastness testing of leathers with a bold grain pattern.

Wet rub fastness testing involves using a white felt pad that is wetted and rubbed by a machine to-and-fro across the leather surface. After a prescribed number of rubs, the machine is stopped, and the white pad and the leather are both examined to see if the leather colour has been transferred .

"Clearly the expectation is that as little colour transfer as possible will be observed, with no visible damage to the leather surface," Geoff Holmes says . "But it's not always so.

"An oddity arises with leathers that have a bold grain that's been induced by dry drumming."

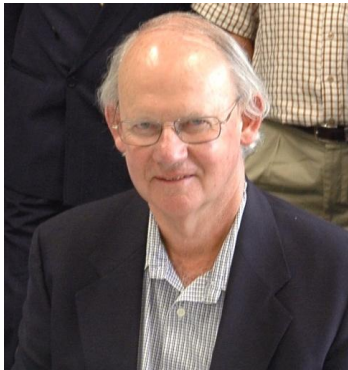
A dry drummed leather will generally have a grain pattern described as 'pebbled'. Because of the natural variation across a hide, the dry drumming action delivers different pebbling in some areas.

"We are finding that where the pebble effect is coarse, the wet rub fastness can be relatively poor, and where the pebble effect is fine, wet rub fastness is good," Geoff says.

"We think coarse pebbling occurs where the leather structure is looser, and with this kind of structure, the softer grain surface deforms under the felt pad as it rubs.

"Where the pebble effect is finer, the leather structure is tighter, and does not deform as the pad moves across it."

Peter Wortley retires from AFRDI board



Long serving board member Peter Wortley has retired from the AFRDI board, but will remain active as an advisor.

Peter joined the board in 1993, and developed a particular interest in engaging AFRDI in testing and certification of both commercial and residential products, standards development and AFRDI's Consumer Concerns program.

He also took a special interest in leather products, and in researching AFRDI's own Leather Standard, AFRDI Standard 146, along with the "Is it Really Leather?" campaign, which gives specifiers, architects and consumers pointers on leather suitability, leather types and quality.

Put simply, where the leather is tight and there is no deformation, the test pad will slide freely over the surface, but where there is any deformation, there will be more friction, and a greater risk of colour removal.

AFRDI's Dr Paul Semmens comments that wet rub fastness is the most common testing failure encountered in leathers submitted by AFRDI for testing.

Paul adds that there is also frequently a need for discussion with clients about the type of leather submitted, the correct type not always being correctly identified, with possible implications for later marketing and advertising claims.

AFRDI thanks LASRA for information in this story. Visit them online at www.lasra.co.nz

Peter's son Ben, marketing manager of the Wortley Group, now joins the board.

Also joining the board are John Osmelak, general manager of the Victoria-Tasmania division of the FIAA, and Martin Bloder, managing director of Sitz Australia – QCF.

Roger Ward has submitted his resignation after one year on the board.

Mark Copperwaite, managing director of Stem Intelligent Seating, now takes on Peter Wortley's former role of deputy chairman, while Peter McCutcheon continues as board chairman .

Keeping the AFRDI watchdog honest: our NATA accreditation

AFRDI operates a NATA accredited laboratory at its Launceston headquarters, but many of our clients ask us, what does this mean, and how does this accreditation benefit us?

NATA is the National Association of Testing Authorities, and is Australia's national laboratory accreditation authority. NATA accreditation recognises and promotes facilities competent in specific types of testing, measurement, inspection and calibration.

NATA accreditation benefits testing and inspection facilities by checking whether they are performing their work correctly and to appropriate standards, and provides them with a benchmark for maintaining that competence. Many non-NATA facilities operate in isolation from their peers, and rarely, if ever, receive any independent technical evaluation as a measure of their performance.

A regular NATA audit checks all aspects of a facility's operations related to consistently producing accurate and dependable data, follow-up action is monitored by NATA so the facility is confident that it has taken the appropriate corrective action.

In effect, our NATA accreditation 'keeps us honest': it benchmarks our performance, and is a way of assuring our clients that the tests and assessments we carry out on their behalf are both valid and in keeping with best established scientific principles.

AFRDI links with Standards Australia

AFRDI also works closely with Standards Australia, again prompting the question, what are standards, and why are they so important in the technical testing and certification of furniture?

Standards Australia is an Australian not-for-profit standards developing organisation and is Australia's representative on the International Organization for Standardization [ISO], the International Electrotechnical Commission [IEC], and the Pacific Area Standards Congress [PASC].

A technical standard is an established norm or requirement. It is usually a formal document that establishes uniform engineering or technical criteria, methods, processes and practices. Standards set out specifications and procedures designed to ensure that products, services and systems are safe, reliable and consistently perform the way they were intended to. They establish a common language which defines quality and safety criteria. This latter point facilitates market exchange, so that distant parties unknown to one another are able to share expectations on the qualities of products and processes, and ensure compatibility.

Standards are generally established by consensus agreement and approved by a recognised body. They are practical and don't set impossible goals. They are based on sound industrial, scientific and consumer experience and are periodically reviewed to ensure they keep pace with new technologies. In the Australasian region, standards frequently apply to both Australia and New Zealand, and are published as AS/NZS Standards.

Standards Australia has developed a collection of over 7000 Australian Standards and associated publications, all available in a variety of formats – from the traditional printed book, through to advanced online subscription services. Australian Standards are sold and distributed worldwide by SAI Global Limited.

Where suitable standards do not exist, particularly to reflect rapidly changing community concerns, AFRDI researches and develops its own, the recent AFRDI Standard 150 Sustainable Development for Commercial Furniture being an example.

AFRDI 150: a Standard with far-reaching beneficial effects

This Standard, AFRDI's **Sustainability Standard**, is a tool for product assessment, but also sets a course for a progressive change in manufacturing processes to benefit the environment, the workforce – particularly through the gradual elimination of unsatisfactory working conditions overseas – and to give end users a superior product with enhanced recycling or refurbishment capabilities at end of life.

And another thing !#%!!!*!!

by Bob Panitzki, CEO of AFRDI

You've no doubt heard the phrase 'the whole truth, and nothing but the truth.'

We often come across evidence of selective use of the facts: a statement that is probably more or less true, as far as it goes, but which yet fails to tell the whole story, often omitting critical information which could influence a decision to purchase.

Let me give you an example. How often do you see the words in an advertisement :

•'the item 'is manufactured to XYZ standard'. But it is not necessarily **compliant** to the standard, or at least independently verified as such.

Am I being precious about standards? I don't think so. They are – or should be regarded as – the foundation of responsible manufacturing practice, guaranteeing that items meet performance and safety criteria.

Potential customers should always ask for evidence when considering making furnishing purchases. That means:

- Ask for test reports**
- Ask for certificates, including photographs, and**
- Get a full description of the certified product**
- Check that the certificate report is entire (i.e. ensure that pages are not missing**
- Ensure that all reports refer to the same job, and are not a mixture of reports from various dates**
- Check that the laboratory which did the testing is independently accredited to perform the tests**

A little bit of straightforward checking before purchasing can be worth a power of prevention and remediation after the event! Don't be bamboozled by weasel words and descriptions calculated, ultimately, to mislead.

Advertising issues: chairs with arms

If a chair has not been tested and certified with arms then it cannot claim AFRDI certification with arms. Adding arms to a certified chair does not constitute a new AFRDI certified chair, unless the chair with arms has been tested appropriately.

Under AS/NZS 4438, the standard to which office chairs are tested, chair arms are subjected to considerable static loads, in both a vertical and lateral sense. It is a fact of life that quite a few arms fail this rigorous test – that's why we don't like seeing chairs that have been certified without arms turning up in advertisements with arms and then claiming to be AFRDI certified.

We're not happy about this, and neither should consumers who put their trust in the AFRDI Blue Tick certification label. It's a tough standard, and we will work hard to maintain its true meaning and worth.

Better times ahead for furniture industry in Australia

A comprehensive report into Australia's furniture manufacturing industry says there is a more optimistic outlook now than at any time during the economic crisis of the past two years.

The report, commissioned by the FIAA, identifies rising consumer and business confidence for the optimistic outlook, coupled with steady population growth and the prospect of resumption of growth in new housing activity.

Looking back, however, is not such a rosy picture, the Australian industry having recorded another year of contraction, with manufacturing revenue down 4.3 per cent, and imports rising by 11 per cent.


During the past year, manufacturing employment has remained flat, at about 68-thousand jobs.

A copy of the report can be purchased through the FIAA. **Contact them on (02) 9648 4455.**

Contrasting with the Australian experience, the United States industry continues to face considerable downturns, mirroring the broad performance relativities of the Australian and U.S economies during the recession.

Residential furniture orders are approaching a 20 per cent drop compared with the same period last year, itself a contraction from 2007 levels of activity.

Reports from the U.S. indicate that the industry may have bottomed-out, and that some recovery is on the cards.



AFRDI's Consumer Concerns Service
can help you by providing professional intermediaries to assist in resolving consumer disputes
Call Stacey Saunders on
(03) 6326 6155 or
email: stacey@furntech.org.au



Why Woods has stayed home instead of buying offshore

At a time when many in the Australian furnishing industry have long ago turned to imports as the source of much of their stock, one local company has resolutely gone against the trend...and thrived.

Melbourne based Woods Educational Furniture supplies only one market sector – school furniture – and it is this high degree of specialisation that has enabled it to do well because nearly everything it uses in its production is sourced from within its own factory.

Director of sales and marketing Glenn Webster makes no bones about company policy.

"In our production facility we do our own steel cutting, bending, welding and powder coating. We have our own timber department, upholstery department, assembly and transport division.

Keeping work in-house

"We believe that outsourcing of manufacturing and transport is a false economy. What you save up front will be quickly lost when you encounter a product defect."

Continuing the in-house theme, Woods has its own product design team.

"All product innovations or product changes are conducted through our development group," says Glenn.

"We take a holistic approach to this process. The product development group consists of the managers of product development, production, transport, marketing, sales and the managing director.

"By involving all disciplines in the business right through the product development process, we create products that are of high quality, that have been designed for efficiency in transport, minimisation of material waste, and overall efficiency through the production cycle."

Working in a tough market

Glenn describes the school market as the toughest one there is for durability of furniture. It is also what he describes as a 'connected market' in that the people making the purchasing decisions in schools around each state know one another and share information readily.

"It means that as a supplier you cannot afford to make an inferior product."

To meet their self-imposed standards Woods maintains a tight control over all aspects of the manufacturing process. This extends down to seemingly unimportant things such as owning its own tooling for items such as student chair glides, plastic storage tubs for student desks, and ferrules for student desks.

The only importation that takes place is for some plastic components designed and made in Germany.

AFRDI certification

Woods takes the quest for durability, quality and suitability for purpose seriously. The company's PantoFlex student chair has been endorsed by the Chiropractors Association of Australia for use by school students. As well, all three current student chair designs have been tested by AFRDI for compliance against AS/NZS 4610 to the severe use level.

There's another factor that keeps Woods on track. All staff, from the managing director down, are part of the company profit share scheme. Glenn Webster credits this factor, along with the open information flow to all staff about the company's trading position, as creating a strong team ethic. Profit sharing has been part of the Woods ethos since the company's foundation in the early 1950s.

Woods is recording sales in excess of \$20 million, and has 88 employees. Glenn Webster admits it's no easy task to keep on track, allowing for the seasonal nature of much of the work. Schools traditionally place orders for the following year in October, meaning there's a considerable pressure on the entire operation to meet tight delivery deadlines.

Acknowledging that the company must be 'doing something right' it recently was named Victorian manufacturer of the year. Woods supplies furniture to pre-schools, kindergartens, primary schools, high schools and tertiary institutions throughout Australia, New Zealand and the Middle East.

Furniture news spots

New raw material for plastics: a move towards greater sustainability

Our industry is a major user of plastics, so it may be of interest that South Korean scientists have succeeded in producing the polymers used for common plastics through use of biomass rather than the more usual fossil fuel based chemicals.

Through the use of a metabolically engineered strain of *E. coli*, a research team has produced a bio-based polymer that is both biodegradable and which has low toxicity. *E. coli* is a bacterium that is commonly found in the lower intestine of warm blooded organisms.

Organisations are now testing furniture for the presence of dimethylfumarate (DMF).

Used to protect items from attack from micro organisms during long-distance transit, DMF was banned by the European Union in March 2009, and the temporary ban will be reviewed in March 2010.

DMF has been implicated in claims alleging allergic reaction to the chemical. It is suspected that extremely low concentrations of DMF can cause dermatological problems in susceptible individuals.

AFRDI can provide a DMF testing service. Contact paul.semmens@furntech.org.au

Major recall underlines need for comprehensive product testing

A British baby stroller brand, Maclaren, is recalling every folding umbrella style stroller it has sold in the United States over the past ten years.

The voluntary recall, involving some one million strollers, follows reports of children's finger tips being amputated in the stroller's hinge mechanism.

A children's four piece garden setting – marketed by Retail Adventures Pty Ltd – has been recalled because of a finger entrapment hazard.

The chairs that come with the setting do not match the mandatory safety standard for children's folding chairs. The settings were sold between August 2008 and September 2009, by Sam's Warehouse, Go-Lo and Crazy Clark's.

Major recall of Drop-Side Cribs in US

The U.S. Consumer Product Safety Commission, in conjunction with a Canadian company, has recalled more than 2.1 million drop-side cribs, following reports of infant entrapment and suffocation.

The cribs were marketed under the Stork Craft and Fisher-Price names in Canada and the United States. The CPSC said there 110 incidents reported, including entrapment, suffocation, and falls. The cribs were manufactured between 1993 and October 2009.

Free repair kits are being distributed to crib owners, with a warning from the CPSC to remind parents not use any crib with missing, broken, or loose parts. The Commission warns that all sides and corners of cribs should be checked for disengagement, which may create a gap and therefore trap a child.

In Australia, Better Health Victoria claims that an average of 69 Victorian children need hospital treatment every year for serious injuries related to a cot. Injuries include falls and getting parts of the body stuck between bars. Fittings such as bolts, knobs and corner posts can catch on clothing and cause strangulation. All cots sold in Australia need to comply with Consumer Protection Notice No. 6 of 2005, which amends elements of Australian Standard AS/NZS 2172: 2003.

AFRDI's Lee Bowkett, team leader for testing cribs and bunk beds, says the CPSC warning is timely for Australian parents as well.

Lee says most failures he comes across in testing are dimensional – loose side and end components, due to insufficient glueing, and seizing of the drop-side during durability tests.

Lee further comments that some in-the-field failures may not be replicated by current testing to relevant standards, indicating that an upgrading of the strength and durability components would be in order.

A Finnish designer, Samuli Naamanka, is lifting the sustainability game in a practical way with the production of a 100% biodegradable chair seat .

The seat is made from linen and cornstarch, polymerised from natural fibre. Naamanka now is planning to design a whole range of furniture based on the same principle.

imagine the power

to positively change the way
furniture is manufactured

- to influence product design to facilitate recycling or refurbishing at end of life
- to source raw materials and labour in a more ethical way
- to save on transport and packaging
- to use less water and energy
- to reduce pollution
- to manufacture better furniture, with greater quality, longer life, and full recyclability

All this is the power of
AFRDI 150

AFRDI Green Tick
Benchmarking Sustainability in
Commercial Furniture

Recall process under review

The Australian Competition and Consumer Commission is currently reviewing the effectiveness of the product recall system within Australia and internationally.

The information gathered will be used to make improvements to the system and look at ways of improving the way consumers are informed about product safety issues.

Check www.accc.gov.au

Did you know that...

Although wrenches have existed for many centuries, the first wrench patent granted in 1835 sparked the advancement of these tools throughout the nineteenth century, resulting in the wide array of types and sizes currently available.

A recently updated American National Standard, [ANSI/ASME B107.100-2002 \(R2008\)](#), *Wrenches*, aims to ensure that wrenches are used safely and appropriately. The standard provides the general, dimensional, performance, and safety requirements for box wrenches, combination wrenches, open ended wrenches (including but not restricted to engineer's angled and tappet wrenches), and flare nut wrenches (including combination, offset slotted box, and open end wrenches).

The [American Society of Mechanical Engineers](#) (ASME), an ANSI organisational member and accredited standards developer, is a not-for-profit professional organisation promoting the art, science, and practice of mechanical and multidisciplinary engineering and allied sciences. ASME develops codes and standards that enhance public safety and enables learning and technical exchange opportunities benefiting the global engineering and technology community.



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