

A Christmas present from AFRDI

AFRDI is reducing charges for testing height adjustable swivel chairs to AS/NZS 4438. At the same time, charges for testing chair mechanisms also will be cut.

CEO Bob Panitzki says the board considered this was a responsible move during a period of industry downturn. He added AFRDI would also hold other testing prices at current levels.

Laboratory upgrade

AFRDI has recently completed an extensive upgrade of the laboratory area. Installation of a powerful modern air conditioning system has made it possible to remove an internal wall between two rooms, and also to remove an obstructive air lock structure which was required with the earlier low capacity conditioning system.

The work has considerably increased the capability to hold materials for testing under closely controlled conditions of temperature and humidity.

Equipment

A new testing machine simulating the downward and outward forces applied when arising from a chair with arm rests has been commissioned.

Designed and built in-house, the machine can be set up quickly for a variety of chair types, and enables accurate assessment of assemblies which have often been over-represented on the failure list.



*Season's Greetings from everyone at Furtech-
AFRDI. Thanks for your business in 2012. We
look forward to working with you again in 2013.*

Closing 21 December, re-opening mid January

NZ office chair joins elite AFRDI group

An office chair made by Eden Office Seating of Auckland, New Zealand, has gained one of the top AFRDI ratings under the Rated Load standard, being successfully tested at the 160kg single shift level.

The chair is the Spectrum long/wide seat. The chair also has achieved Level 6 rating under AS/NZS 4438.

Eden Office's Philip Win outlined some of the reasons for undergoing the testing:

- Our company has long had a policy of manufacturing office chairs with a significant emphasis on strength and durability
- We enjoy a reputation for product reliability which has flowed out of that approach
- This level of testing is therefore really a natural extension of the same philosophy

Story continues next page

BIFMA speaks out on fire retardants

Given the increasing body of evidence that indicates the persistence, bio-accumulation and potential health aspects of many fire retardants, BIFMA in the United States believes that **the risks associated with the use of these chemicals is greater than the hazard associated with the fire risk from furniture without fire retardants.**

This is especially true given the fire safety record of office spaces due to today's fire prevention technology such as the increased use of smoke detectors and sprinkler systems, and societal changes that include fewer smokers and smoking bans in buildings. Many furniture purchasers are looking for safer, more environmentally friendly products that do not contain chemicals of concern, including fire retardants.

Therefore, BIFMA strongly supports the elimination of fire retardant chemicals of concern in all manufactured products.

BIFMA calls on all relevant organisations to support education and research efforts to reduce the environmental and human health risks from fire retardants.

In the UK, FIRA quotes that the furniture regulations specify a level of ignition resistance for all upholstery fabrics but they do not insist on a cover fabric being flame retardant treated. Nevertheless most cover fabrics need some form of treatment to satisfy the fire safety regulations.

AS/NZS currently specifies fire retardant additives, and AFRDI is constantly monitoring the situation.

...NZ chair continues from page 1

- In addition, we are challenged in New Zealand by an extremely wide variance in the anthropometry of the resident population. In particular, there are sections of the population, particularly here in Auckland, who would be larger and heavier than would be found in a 'normal' population distribution internationally. This is a reality that we are privileged to cater to and deal with, you might say on a daily basis. So it only makes sense to attain certification that is totally relevant to this local user population

- The credibility of the AFRDI-Furntech brand is also an important element in validating the strength of our product offering, against the 'self-assessed' ratings which are so prolific these days.

Over 60,000 child car seats recalled due to safety concerns, says ACCC

Recalls of tens of thousands of child car restraints have been announced after testing found that the anchor kits or brackets could fail in the event of a collision, increasing the risk of injury to the child.

Imported by Hemco Industries, the majority of affected anchor kits and brackets were supplied with car seats and capsules sold since April of this year, including major brands such as Tomy Australia, IGC Dorel and Como Baby. Some of the anchor kits and brackets were also sold separately as aftermarket accessories.

"The ACCC understands that these anchor kits and brackets are generally used in station wagons, hatchbacks, four-wheel drives and older vehicles. Many, although not all, newer vehicles tend to have an anchor bracket already installed in the vehicle," ACCC Deputy Chair Delia Rickard said.

Affected units can be identified by the batch number which has been stamped directly on the product. The affected batch numbers are 022 and 023. All other batch numbers are not affected by the recall.

The anchor point is generally located on the parcel shelf in sedans and on the floor in station wagons, vans and hatchbacks. It may be located on the inside roof of some station wagons. Anchor point locations are indicated in the vehicle owner's manual.

According to the RACV, approximately 70% of child restraints are not installed correctly. Consumers are encouraged to also use this as an opportunity to check that their child restraint is correctly installed.

Steelcase adds products to AFRDI Sustainability scheme at top level

Steelcase Australia has achieved the top Platinum level certification (the best practice level) for three products under AFRDI Standard 150 (Sustainability for Commercial furniture).

The products are:

- the **Leap** chair, which is a height adjustable task chair featuring a flexible backrest intended to ensure the user's back is always supported. At least 88% of the Leap chair's materials are recyclable
- the **FrameOne** system is a bench range that has been designed to support the various levels of mobility and collaboration required by users, and
- the **media:scape**, a conferencing system that integrates furniture and technology, which Steelcase says is reshaping the way people collaborate in a networked world.

Each of the products has met AFRDI 150's requirements in the area of product stewardship, compliance with laws and regulations, fitness for purpose, dematerialisation, hazardous substances, indoor environment quality, disassembly, recyclability, modularity, product refurbishment, operational energy water and waste, corporate social responsibility, and transport and packaging.

Steelcase Australia's managing director, David Friend, said: "Complying to global, regional and local standards including AFRDI is a key step in ensuring our products meet the codes and standards of each market that we do business in. Steelcase has recognised AFRDI as one of Australia's key organisations providing standards, testing, product certification and research for buyers and sellers of furniture.

"We have a commitment to sustainability, for it is one of today's fundamental business challenges – and our inspiration. Every day our team works to create maximum value from our available assets and to be catalysts for good.

David added: "We know we are on a journey. Along the way, it is our responsibility to care for our planet and its people. As we continue to study, learn and share insights, our commitments and accountabilities continue to grow in measurable and meaningful ways.

"All of this leads us to deliver innovative products and increased value to our customers and stakeholders."

View other companies' products that have achieved AFRDI 150 on our Website www.furntech.org.au Look under Sustainability.



Green Tick
Product
Certification

Standards update

AS/NZS 3813: 201x Plastic monobloc chairs

Major action items are:

- A review of the draft of the General, Strength and Durability, and Stability sections
- A first draft of the UV and weathering section
- A first draft on the ignitability section
- Further validation testing, including on high temperature samples (at around 35 deg. Celsius).

AS/NZS 4386: 1996 Domestic kitchen assemblies

A project to undertake a complete review of the standard is under way, and a committee is being formed.

AS/NZS 2172 Cots for household use – safety requirements

Several changes are in hand, including:

- Implementation of more rigorous tests to test drop-sides on cots, and
- Development of a new firmness test for mattresses.

A new player in the field – AFRDI Rated Load Standard 151 for fixed height chairs

Through its new standard, AFRDI is recognising the changes in furniture usage patterns and the growth in human sizing of the past four decades.

The current standard for fixed height chairs, AS/NZS 4688, caters for general use, but further defines that as meaning only for occasional use by people whose body mass exceeds 100 kg. Changes in the size of people, longer use times, and wider use of fixed height seating in public spaces, particularly malls and food courts, have prompted an examination of how we assess and certify this class of chair.

In the new standard, there is consideration of how chairs will be used in non-traditional offices, in break-out areas, for example. Provision also is made for chairs destined for bariatric use in health facilities, for usage by people with a user mass of up to 300 kg. At the other end of the scale, the new rated load standard has testing at the 135, 160 and 185 kg points: it is pointless to be testing at a limit higher than the anticipated use patterns. So, for example, the 135 kg rating would normally be adequate for chairs in a school assembly hall where it would be extremely rare to find a student above that weight.

But perhaps the most important aspect of the standard is the blurring of what might once have been clear demarcation lines between product that is considered as 'private' and that which is 'public'. It is highlighted in the difference between chairs tested to AS/NZS 4438 (the standard for variable height chairs) which are commonly allocated to one person in an office environment, in which case the traditional rating of 'up to 110 kg' is adequate more often than not.

For fixed height chairs, use is typically uncontrolled, or public, that is, they are used by whoever comes along. In many public space settings, the use by people with a body mass greater than 100 kg will be much greater than 'occasional'. The chairs themselves might be fine, and probably are, or more of them would be failing – but the certification is not, because of the wording of the old standard. It begs the question of whether most fixed height chairs should be considered commercial or public rather than private or domestic, because of uncertainty over who will be using them.

When should the old standard 4688 still be used? Levels 4,5 and 6 are still appropriate for many of what might be termed traditional uses where, in a broad sense, the body mass of potential users is known.

Issues of product liability would tend to indicate that in all other applications, chairs tested to the rated load standard should be specified because of their potential for greater reliability under a wide range of loads. Fixed height chairs may of course sometimes also swivel – we recommend testing to AFRDI Standard 142 for these items.

rated load testing: product confidence

Rated loads and weight ratings: an explanation of AFRDI's testing

by Ian Burton, AFRDI technical manager

There is still confusion over the concept of rated load and weight ratings for chairs.

"When AFRDI rates a chair for a person with a body mass of up to 135kg, we apply over 400kg to the chair during testing. People continue to be confused about this point, and in fact sometimes consider the chair is then 'rated' at 400kg," Ian says.

"Similarly, for testing to AS/NZS 4438 (i.e. chairs with a suggested maximum user body mass of around 110kg), they find we put 2000N on AFRDI Level 6 chairs, and the next thing is, they're claiming the chair is rated at 200kg.

"It simply does not follow, and in fact is a false and misleading claim.

"The reason is due to the effects of **impact loading versus static loading** (some manufacturers claim elevated 'load ratings' for their chairs when the figure is derived from a static loading involving maybe just ten load applications, and loads of perhaps as little as 160 to 200 kg).

"If you want to see an example of impact loading, jump on some scales: someone who weighs only 70 kg can wreck them. Impact can 'convert' 70kg into what is effectively two or three times that load".

This example leads on to another of the key strengths of AFRDI's testing programs – fatigue testing. These are tests where a load which exceeds the 'projected rating' of the chair is applied over hundreds of thousands of cycles. The load applied simulates the action of a person sitting down, in effect, a type of low level impact loading.

"Many chairs will not be adversely affected if the only 'test' they receive is a load applied in a careful manner only a small number of times.

"Our testing is quite severe yet realistic in terms of the way people use chairs, and the chairs which survive this testing – or indeed are modified or re-engineered to survive it – are genuinely superior."



Special deals may be available on combined AFRDI Blue Tick, AFRDI Green Tick or Rated Load testing – call Furntech-AFRDI on (03) 6326 6155 for details
Email: info@furntech.org.au

Bunk bed safety regulation: the view from the ACCC

Bunk beds are a regulated product under the Australian Consumer Law (ACL).

The Australian Competition and Consumer Commission (ACCC) has recently released detailed compliance information in a new publication, the 'Supplier Guide for Bunk Beds,' available from the Product Safety Australia website www.productsafety.gov.au.

The mandatory consumer product safety standard for bunk beds regulates the supply of bunk beds in Australia. This regulation has been in place since 2003, with the ACCC administering and enforcing it nationally. It is an offence under the ACL to supply non-compliant products, and suppliers face fines of up to \$1.1m for companies and \$220,000 for individuals if the products they sell do not comply with mandatory requirements. Hefty fines have been pursued in certain cases against bunk bed suppliers.

The ACCC will act to enforce and ensure compliance with the mandatory standard where there is evidence that the safety of consumers is at risk. The Commission conducts frequent marketplace surveillance of regulated consumer products including bunk beds (both in-store and online) in order to ensure they are compliant with safety regulations.

A number of product recalls have taken place over the last few years where certain safety requirements for bunk beds have not been met. For example in 2011, five suppliers were required to recall several models of bunk beds (and one had to recall four models) after ACCC surveillance, testing and consumer complaints.

What should suppliers look out for?

The current regulation references the 1994 version of the relevant voluntary Australian standard, AS/NZS 4220 – *Bunk beds*. This means that the regulation declares certain parts of AS/NZS 4220:1994 as mandatory.

The mandatory standard specifies minimum safety requirements that focus on ensuring that bunk beds:

- are supplied with effective safety guard rails on all sides
- do not have potential entrapment or snag points in their structure, and
- come with appropriate markings.

These requirements aim to reduce or minimise the risk of injury or death associated with the use of bunk beds, particularly by young children. Suppliers should read the supplier guide for bunk beds for more information. All suppliers in the supply chain - manufacturers, importers, distributors, wholesalers and retailers – must make sure the bunk beds they sell in Australia meet these requirements, or face heavy penalties.

The bunk bed standard applies to consumer products supplied for private use. However a state government regulator (Queensland Office of Fair Trading) has recently extended the coverage of regulation in that state to the supply of bunk beds in short term rental accommodation. For more information on this see www.fairtrading.qld.gov.au.

Mandatory reporting and product liability

As well as complying with product safety regulations, suppliers are required by law to report to the ACCC any incidents they become aware of where consumer goods have been associated with a death or serious injury or illness of any person.

Suppliers must do this within two days, even if they are unsure whether the product was theirs. Also, they must report it even if they did not sell it to the consumer directly. Suppliers can submit these reports via the 'Mandatory report form' on the Product Safety Australia website www.productsafety.gov.au. Suppliers should also be aware of the product liability provisions of the ACL, which can allow consumers to seek compensation or damages for personal injury or other loss caused by product safety defects.

Further to our report last issue on onshoring/reshoring, specifically the process of bringing furniture manufacture back home, from London comes news that underpins the value of the exercise, in some marketplaces at least.

New dynamics, such as the rising cost of freight, are driving the onshoring exercise, making local production, in comparative terms, a more viable proposition. Furniture manufacture is worth around 7.5 billion pounds a year, not including retail profits, although this is a contraction from a peak of 9 billion pounds reached a few years ago.

Source: London Loves Business.

In another case highlighting changing times and accepted wisdom, the US is said to be becoming one of the lowest cost producers in the developed world.

Manufactured exports, a bright spot of the US economy in recent years – are set to surge. This process, together with reshoring, is anticipated to add between 2.5 to 5 million jobs by the end of the decade as manufacturers shift production from leading European countries and Japan to take advantage of lower costs in the US, according to the **Boston Consulting Group**. US exports have risen by 30 per cent since 2006, far outpacing growth in gross domestic profit.

In Sydney, Interface – Australia’s largest carpet tile manufacturer – has announced its intention to build a new factory in the city’s South-West, replacing a factory at Picton destroyed by fire earlier this year. Interface Australia’s managing director Clinton Squires, said that while a lot of companies are moving offshore, Interface is determined to remain close to its customers.

To round out coverage this edition, further evidence from overseas markets of the value – in terms of safety to consumers – of testing and certification. More than 70,000 office chairs were recalled in the US and Canada last month because of the seat plate breaking in units described as entertainment chairs and executive chairs.

The seat plate was also at fault in the recall of 8,400 chairs in the US. The units in question were prestige leather upholstered office chairs. It is not known whether any of the chairs were tested prior to release to the market.

ACCC urges caution in some online purchases

The Australian Competition and Consumer Commission (ACCC) has advised Australian consumers to avoid potential safety issues by ensuring their online purchases meet mandatory Australian Safety Standards.

ACCC Deputy Chair Delia Rickard said it is important for consumers to understand the potential product safety risks when they buy online. “Mandatory standards and bans apply to some products sold in Australia. Even though products sold here are legally required to meet these requirements, people may be able to purchase products online which don’t meet these standards or have been recalled in another country,” she said.

The ACCC recently negotiated the Australian recall of 205,000 Bumbo baby seats to fit a safety harness after reports of multiple serious injuries to infants who fell from the seat. The ACCC became aware of this safety concern after Bumbo baby seats were recalled in the United States.



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