

AFRDI Green Tick: A new and meaningful Sustainability Standard to serve the Furniture Industry

As you read this article, Furntech-AFRDI is rolling out its new Sustainability Standard, AFRDI Standard 150, the AFRDI Green Tick, culminating three years of research and industry consultation.

In keeping with its long development phase, AFRDI Green Tick offers unique qualities as a mature, second-generation Sustainability Standard.

It brings together the qualities of strength and durability, along with fitness for purpose and compliance with ergonomic principles embodied in Blue Tick product certification. To these it adds sustainability i.e. all products awarded the AFRDI Green Tick will have to undergo Blue Tick certification, or be certified independently to a suitable standard.

Being awarded the AFRDI Green tick therefore, even at entry level – Level One – represents a considerable achievement, and compliance with important principles which together will give consumers confidence in the product labeling: that it is not just a rubber stamp, but a standard with real standing and meaning.

The AFRDI Green Tick is being offered at three levels, Level One being entry level as mentioned, rising to Level Three, which is quite deliberately pitched at the aspirational level –Furntech-AFRDI expects companies gaining Level One Green Tick will commit to sustainability principles which, over time, will see them change their manufacturing methodologies to encompass both sustainability, recyclability, and care for the natural environment.

"For this reason, we don't expect any companies will get a high level rating at first," says Furntech-AFRDI chairman Peter McCutcheon. "It will take time to make the changes that will earn higher certification levels.

AFRDI board
chairman, Peter
McCutcheon



"Companies may well ask, why would we bother with the AFRDI Green Tick, when we can achieve environmental certification from other sources?

The answer, as we see it, is that ours is a rigorous, scientifically-applied standard, that recognises that a long journey has to start with a small step."

Mr McCutcheon added that the AFRDI Green Tick would not be anti-business. "We will charge for initial assessment and certification, much the same as we have done for some years with Blue Tick, and there will be an assessment review, either in three years, or earlier if a company feels it has progressed sustainability to a higher level.

"We certainly will not be charging based on production, or units sold. We consider that practice contrary to sound business principles, and penalises companies which are successful."

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Building on the benefits of AFRDI Standard 150: new opportunities opening

from Bob Panitzki, CEO of Furntech-AFRDI

The recession is not lessening its grip on our economy, but I can't help feeling that this is nonetheless a time of considerable opportunity for business development.

There are two reasons I'm feeling a little bullish as we emerge from winter. The first comes from an article I read recently about retrogreening of offices, the second from the emerging potential of our new Sustainability Standard.

The term retrogreening comes from a report by consultants Davis Langdon, who have investigated ways in which building owners can use the slowdown in the economy to reposition their assets. They're suggesting there needs to be a rethinking of the way owners invest, as there are opportunities to achieve greenhouse gas reductions while creating employment through rebuilding and refurbishment.

Davis Langdon pose the question: why upgrade office stock in a time of downturn. The answer is that they estimate more than 80% of Australia's existing commercial office space is more than ten years old – so there is a demonstrable possibility of upgrading office space to modern environmentally-conscious design principles.

It follows that if office owners do decide to upgrade, there is considerable opportunity for the Australasian furniture trade to supply new seating, workstations, storage and other fittings, all of course meeting the new AFRDI Standard 150 for sustainability.

And that's not a tongue-in-cheek comment. Furniture which is certified and tested by AFRDI to gain both the Blue Tick and the AFRDI Green Tick is quantifiably of superior quality, from a constructional standpoint and from the point of view of its environmental and sustainability credentials, which are essential qualities in a marketplace that is adopting new-found values based around the broad concept of doing what's right for the planet.

There is certainly an opportunity for local manufacturers to gain a march on the flow of imported furniture which may not have been performance tested, or tested for sustainability.

I'm hoping that in the not-too-distant future, I'll be reporting on this as being one of the ways in which the seemingly unstoppable employment downturn in the local furniture manufacturing sector was reined in.

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Mr McCutcheon added that he was confident AFRDI 150 would be taken into procurement schedules by both government and private enterprise, as there had already been a high level of enquiry from both a Federal and State level.

"This standard is all about giving end users confidence about the quality of the products they are buying, confidence about the environmental credentials, and confidence that longer product life with recycling or remanufacture at end of life is a guarantee, not just a promise."

Beware of Extreme Load Rating Claims For Seating



Scarcely a day goes by at AFRDI without someone calling up seeking to verify that a certain advertised chair is rated at a load capacity of 'up to 200kg.'

And AFRDI CEO Bob Panitzki has a stock answer: "I know of very few chairs indeed that have been tested to such an extreme loading.

"Certainly at AFRDI we have tested only a handful of chairs outside the normal scope of the relevant standards – AS/NZS 4438 to 110 kg and BS 5459 to 150 kg. Elsewhere in the world, we understand there is limited testing outside the above range.

"Users or specifiers really need to be careful about choosing chairs that make claims about a capability to handle extreme loadings. They should demand to see test certificates to check whether such claims are verifiable, or are simply an advertising ploy.

"Failure to verify load rating claims could leave the way open for subsequent liability or injury compensation claims.

"Further, a static load of 200 kg applied to a chair, say 10 times, is not an indication of its weight rating, and in no way compares with the 200-thousand plus cycles of durability testing at higher loads."

AFRDI is currently writing standards on rated loadings as extensions of existing standards applying to fixed height and adjustable height chairs. This process enables AFRDI to test to specific customer-specified rated loads and projected duty cycles.

Rated loadings are being developed as a response to long-term changes in human weight and sizing, from market requests and requirements, and to cope with the current spike in weight as a result of the obesity crisis.

Chair arms – why AFRDI tests both with and without arms

It's perhaps an appropriate time to spell out a few facts about the testing of chairs and, in particular, chairs with and without arms.

AFRDI has noticed that some organizations advertise chairs as being certified – with arms – when in fact they have been certified **without** arms.

It may seem a small point, but to us it is significant.

There are specific tests for arms – they are not just bolt-on additions to chairs without arms. The tests include static sideways load, downward static load, and arm impact.

In short, for a chair to be certified with arms, it needs to be tested as such, and the testing certificate will show this. Specifically, it is false advertising to promote a chair which has been certified without arms as being the same chair when it is fitted with arms – it simply is not, and has not been certified.

Identify foam type when chairs are re-certified

In an earlier issue we spoke about the need for product description labels to be attached to seat bases. Placement of the label is mandatory, but frequently AFRDI technical staff have to chase it up.

Discussion with staff has revealed another problem, this time with foam. When chairs are submitted for recertification, often there is no mention of what foam is used. Testing officers could be tempted to assume that the foam is the same as that used during the original testing and certification process, but as we all know, assuming something is so is a long step away from knowing that it is so.

Testing officers need a declaration from the supplier or manufacturer to say either that the foam is the same, or has been changed.

Similarly, with new clients, a lot of time and cost could be saved if they identified the foam as one which is pre-qualified.

To state the obvious, the more time technical officers spend in doing unnecessary sleuthing to uncover vital information which in any case should be supplied as a matter of course, the more that waste of time will ultimately need to be reflected in the cost of testing and certification.

Compensation for Bunk Bed Injury to Child

A CHILD whose skull was fractured when he fell from a bunk bed during a sleepover at a friend's house has been awarded \$853,396 in damages by the New South Wales Supreme Court.

Cameron Brock Thomas was 10 years old, and on his first ever sleepover at a friend's house at Bilambil Heights on the NSW North Coast in April 2004, when he sustained serious head injuries in a fall from the top bunk.

His friend Joel Shaw was sleeping in the top bunk and early in the morning Cameron had climbed up to speak to him. However, because the ladder attached to the bunk bed had been removed, when he tried to get back down again he fell.

AFRDI technical manager Ian Burton comments that the Australian Consumer Protection Notice scheme, to which bunk beds are certified, does not require that a ladder be present, or indeed attached to a bunk.

BIFMA launches sustainability standard for furniture in U.S.

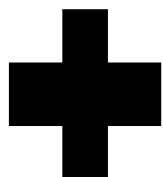
BIFMA International, the trade association for the American commercial furniture industry, and representing the leading firms in the contract furniture market, has announced the launch of a new product certification program, **level™**.

level will verify conformance to a fully transparent, multi-attribute furniture sustainability standard addressing material utilization, energy and atmosphere impacts, along with human and ecosystem health and social responsibility.

The standard is modeled after LEED with specific prerequisites, optional credits, and three conformance levels, with level 3 certification being the highest.



Blue Tick
Product
Certification



Green Tick
Product
Certification

...always look for these labels
on commercial furniture...

Sustainability in Action: Wal-Mart Labels Will Rate Sustainability of Products

Wal-Mart, the world's largest retailer, is planning to place labels on products that will rate them for sustainability, including their carbon footprint, the quantity of water used in their production, and the air pollution left in their wake.

Wal-Mart said it will soon ask its 100,000 global suppliers 15 questions about the environmental practices of their companies, including whether the firms have publicly set greenhouse gas reduction targets. Wal-Mart will then use that information, along with independent verification of a supplier's claims, to give products in its stores an overall sustainability score, including a numerical index that rates goods on their climate impact, pesticide use, and overall environmental damage.

Environmental groups have praised Wal-Mart's plan, saying it would force the company's suppliers to produce their products in less environmentally harmful ways. Wal-Mart has taken several major steps to make its massive operation more environmentally friendly, including significantly reducing packaging, cutting energy use in its stores, and selling only concentrated laundry detergent that uses 50 percent less water in its manufacture.

from Yale Environment 360

Rich countries to help China pay for Greenhouse Gas Emissions?

In a move which could ultimately have ramifications for the Australian economy, and the way in which it addresses issues of sustainability, U.S. commerce secretary Gary Locke has suggested that American consumers should pay for part of China's greenhouse gas emissions.

During a visit to China in July, Locke said that it was America's consumption activity that was contributing to China's greenhouse gas problems, and there was therefore a need to pay for this. The principle that rich-country consumers should pick up the tab for some of China's industrial emissions has been gaining currency, according to a recent article in the Wall Street Journal.

Locke went on to say that China and the U.S. must work together to ensure a level playing field, and to reduce both countries' carbon footprints.

Injuries in the office: how to minimise them through planning

The office working environment has been with us for many years, and so it may seem unusual to find that it continues to be a source injury and compensation claims.

It's recently been brought to AFRDI's attention that a large organisation, seeking to do the 'right thing' by its employees, purchased high-end office chairs for them. But the good intentions ended in tears, with claims for RSI related injuries appearing within a few weeks. The apparent reason – the chairs did not match the (non-standard) work table heights.

WorkCover NSW has drawn together a range of articles covering aspects which should be considered when setting up an office and, as this is an area which involves a number of our members, AFRDI is publishing a synopsis of WorkCover's suggestions.

Systems and processes for the management of health and safety hazards in the office should be built into the day-to-day running of any business and should be viewed as part of the normal operation of the business.

Employers should ensure that all managers, supervisors and employees are aware of their occupational health and safety responsibilities. This should be done through consultation, documenting responsibilities and ensuring there are processes in place to hold people accountable for occupational health and safety performance. Employees also have obligations under legislation to take reasonable care of the health and safety of themselves and others, and to cooperate with the employer in compliance with the legislation.

The core components of an office workstation include a desk, a chair and the equipment used to perform office tasks. The design of a workstation should be directed by the range of people who may use it, the tasks they perform and the type of equipment to be accommodated.

Each workstation must be considered as a whole, rather than by selecting individual items of furniture and equipment in isolation.

Flexibility and adjustability are the key office workstation design issues – individuals can then control how their workstation is set up and organised to meet the changing demands and variety of tasks they perform. A comfortable, productive and satisfying office environment minimises the risk of musculoskeletal complaints, e.g. proper arrangement and adjustment of office furniture minimises the need for poor posture – a footrest is normally not necessary if both desk and chair are adjustable through sufficient ranges, which is the preferred arrangement.

Furniture and equipment may be selected on the basis of user trials, but these procedures require the services of a representative group of users, the larger the size of the group the better.

A comprehensive checklist can be a useful screening tool enabling a short list of chairs to be identified for user trials. It also has the advantage of selection criteria being available 'up front' to manufacturers so that they are more aware of ergonomic design features.

a) Adjustability:

In addition to adjustability to accommodate the different sizes and statures of people, workstations need to be flexible and large enough to accommodate the range of tasks performed and equipment used in the office. The workstation should be easily adjustable and the adjustment mechanism should not create a risk from manual handling. Electric adjustment is the most appropriate.

b) Posture and Movements:

The shape and adjustability of a workstation influences the postures people adopt while working. The location and type of equipment used at the workstation also influences the range of movements performed during work.

• DESKS

The main factors to consider when choosing desks include tasks to be performed; equipment and resources to be accommodated; and adjustability to meet the range of different sizes of the users.

a) General features of desk design: A good desk should have:

- rounded corners with no sharp edges
- good access for legs with no obstacles under the desk to cause discomfort and possible injury
- a flat, smooth surface for ease of writing, of a neutral colour with a non-reflective finish, and
- adjustability to fit most users.

b) Desk Height:

Older style desks are often too high for most employees compared to those designed for computer use. With increased desk height there is a tendency to tense the shoulders to key or write.

Adjustable desks are an advantage where different sized workers share desks as they allow quick adjustment for users of different sizes, and for individuals when they change tasks. However, if the cost of these items is a problem, we should not overlook the possibility of modifying fixed desks to suit individuals. This can usually be done quite cheaply by a tradesperson.

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•CHAIRS

It is essential that office seating is comfortable, appropriate to the task being undertaken and easy for the operator to adjust. Modern office chair design has solved many of the problems of fitting a wide range of different sized people by providing convenient adjustments. The ranges of adjustments should be checked to ensure that they cater as much as possible for the ethnic mix in the workforce involved.

In general, chairs are designed to fit 90% to 95% of the adult population. People outside this range, because they are tall, short or large, may need seating that is tailored to their needs.

Chairs should support the body in a way that minimises awkward postures and provides comfort, however, chair positions may need to be changed often.

No chair can provide a perfect position for long periods and it is important to change postures and get up from a chair many times during the day's work.

a) **Individual Chair needs are different** – the purchase of standard chairs for the whole work group is not recommended without considering people who are shorter, taller or larger than the average. For larger workers a longer seat base is often more comfortable to support the weight and length of the legs.

b) **Design Criteria for Chairs for Keyboard Work and General Office Work**

Chairs should swivel, have a five leg star base for stability, slide-resistant breathable fabric such as wool on the seat cushioning, a rounded front edge and adjustable seat height and backrest for lumbar support. Armrests are optional – they help decrease the forces on the shoulders and back during rest from keying. **They also add support for those workers reading hard copy so they can lean back with some stability.** If provided, armrests should preferably be adjustable in height.

A REMINDER...

...that Furntech-AFRDI operates a
Consumer Concerns Service.

We 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

ISSUES WHICH MAY AFFECT HEALTH AND SAFETY, PRODUCTIVITY AND JOB SATISFACTION OF OFFICE WORKERS:

- Insufficient space at the workstation for documents to be spread out within easy reach; no easy access to equipment such as a telephone and keyboard; no height adjustability of work surfaces; workstations and equipment not set up to reduce awkward postures.
- Standing workstations not suitable for all users; insufficient width and depth for the tasks being carried out; no provision for sitting at this workstation when short periods of continuous work are required.
- Reception desks or counters too deep or high, inadequate work space or risk to security of staff.
- Chairs unstable when sitting down or standing up; chairs not adjustable for different users; chairs damaged or uncomfortable.
- No footrests provided for office workers who cannot rest their feet flat on the floor when their chair is adjusted to suit the desk height.
- No suitable document holders available should user require one.
- Staff not trained to adjust workstation and chair.

Standards...now they're available for space travel

Furntech-AFRDI relies on standards for its testing certification work. Now it seems the Americans are introducing standards to cover space travel. The following is an excerpt from the newsletter of ANSI, the American National Standards Institute.

In an effort to communicate the vital role that standards play in daily life, ANSI is publishing a series of snapshots of the diverse standards initiatives undertaken in the global and national standards arena, many of which are performed by ANSI members and ANSI-accredited standards developers.

Spacecraft

The temperature of the earth's atmosphere ranges from -100°C to 1,500°C. In order to protect astronauts and costly equipment, engineers face the challenge of designing spacecraft that can withstand these extreme conditions.

A recent addition to SAE AIR 1168, a family of aerospace systems standards published by SAE International will aid engineers in protecting spacecraft from the tremendous heat generated during take-off and entry into space.

SAE AIR 1168/11-2008, *Spacecraft Boost and Entry Heat Transfer*, presents theoretical methods for computing and optimising heat transfer – the shifting of thermal energy from hotter objects to cooler objects – to ensure an efficient and safe launch.

SAE International is an ANSI organisational member and accredited standards developer committed to advancing the engineering of safe and environmentally sound mobility systems used in designing, building, maintaining, and operating self-propelled vehicles for use on land or sea or in air or space.