



Certification: why it is worth all the trouble of getting it

by Bob Panitzki, CEO Furntech-AFRDI

These days, whenever I talk to new clients or people who are not yet AFRDI members, I talk to them about product certification. After all, it is at the heart of what AFRDI does, but it goes deeper than that, in terms of the benefits of the process to our industry and to the community we serve.

Product certification is what we offer to clients once newly-tested products have passed a suite of tests to an appropriate standard. At this point, clients enter into a legal agreement that the composition of the tested product will not be altered, or only AFRDI approved modifications will be made, for a period of three years. It's a powerful tool for quality control, and a considerable safeguard to consumers.

Working towards having a product certified also implies a more than passing commitment to quality, and to producing an item which is fit for purpose. It's also a statement that the manufacturer intends to be in the market – as a player with standing – for some time.

For the stockist of AFRDI certified product, there's a real benefit in being able to display the AFRDI logo. Like a secret handshake, it conveys a good deal of meaning, and it implies a sense of trust in the product on offer – that it is, in effect, the best of its breed.

At another level, having AFRDI product certification is widely recognised as being essential for access to tendering for government contracts, and increasingly it is a requirement in the private sector.

We always encourage clients to use the AFRDI swing tags on the products they are offering, and of course the AFRDI Blue Tick is now joined by the AFRDI Green Tick, the AFRDI Leather Standard and the AFRDI Rated Load standard. **It's in the interests of clients to strongly promote these symbols, because they say a great deal about the qualities of the items on offer.** For example, AFRDI Green Tick is hard won, because it's far from being a rubber stamp with 'green' written on it, and the product which carries this mark has 'done the hard yards'. Similarly, while some sellers are emulating the automotive industry 'horsepower wars' of past decades with their bigger and bigger claims for chair load ratings, few can be supported with real data. Under AFRDI's Rated Load scheme, load ratings are calculated on either a single shift or continuous shift basis: they are ratings that can be trusted to deliver what they promise, and for a considerable time.

I know I could be accused of preaching to the converted, but as members of the AFRDI club, we all need to promote as hard as we can the benefits this membership brings, and the solid scientific backing which underpins the claims we confidently make. It's our marketing point of difference, and a good one at that.



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All test reports are not created equal: there may be risks in quoting them, and relying on them to promote sales

Product certification, the process under which a manufacturer makes a legal agreement with AFRDI to maintain the standard of a freshly tested item for a period of three years, is at the heart of the AFRDI product quality assurance offer.

For some time, AFRDI has had a policy of examining (at a cost to the client) reports from other laboratories when considering products for certification. A number of testing laboratories exist in other countries producing reports which may partly satisfy AFRDI's Blue Tick requirements under AS/NZS 4438, the standard covering variable height office chairs.

Lately, however, AFRDI has become aware of some distributors selling chairs which purport to have been tested to the 4438 Standard, quoting testing done by overseas laboratories. Our investigations show the chairs may have only been partially tested to the durability, strength and stability sections of the standard, and often with no flammability tests or labeling assessment. The potential problem goes deeper.

Testing can only be considered as truly valid if carried out by a laboratory which has been accredited to do those tests. In our experience, this is not always the case with overseas establishments, meaning that testing may have little scientific validity.

Check 'foreign' tests carefully

AFRDI is not saying don't trust all overseas test reports, but:

- Do make sure they offer an appropriate service (*refer to the ACCC link below*)
- Wording commonly seen, such as "in our opinion the submitted samples comply with AS/NZS 4438 as shown..." are not adequate as we see it when the list of tests is only part of the standard or the tests are not in the scope of accreditation
- Also seen frequently is the phrase "selected tests" which refers to only parts of the full standard (in some cases no durability/fatigue testing has been performed, just static loading)
- As well, sometimes, no test results are shown, just the tests performed
- Some reports we have been provided with are drafts and are unsigned

Accreditation bodies such as Australia's National Association of Testing Authorities (NATA – www.nata.com.au or call **1800 621 666**) together with its international counterparts, provide independent assessments of, and accreditation for, competence in testing against specific standards.

You should also consult the ACCC's Guide to Product Testing, online at www.accc.gov.au. Pages 8 and 9 of the Product Safety Testing Guide give comprehensive details of points to consider when reading product reports, and checking their validity. Always remember that, in the case of a liability claim arising for personal injury, claims that a product was certified will be rigorously checked.

Check the whole story

To return to our opening point, testing alone isn't the whole story - it is an important additional component to the assurance of quality through certification, the legal agreement entered into between AFRDI and a manufacturer committing to maintain the original testing sample's quality for three years.

Not only does certification embody notions of durability and fitness for purpose – it also underpins concepts of duty of care to consumers through a commitment to upholding manufacturing standards.

For more details on what is acceptable to AFRDI in reports from other laboratories, visit www.furntech.org.au and look under *AFRDI Blue Tick and other services*, **Kit for test reports from other laboratories.**

Compensation for chair collapse

The Queensland Supreme Court has awarded \$271,000 to a bank worker who sustained a back injury when a chair collapsed.

Westpac admitted liability after Tara Andrews suffered injury in the 2006 incident. She sought more than one million dollars, claiming her back injury had destroyed her earning capacity. Westpac said the soft-tissue injury had healed within weeks and ongoing symptoms, if any, were caused by a long car trip Andrews made the following year. Westpac said Andrews' credibility had suffered because she tried to keep the car trip secret and failed to tell her employer or rehabilitation coordinator she was pursuing damages while her worker's compensation claim was in train and her employer was seeking to return her to work. Westpac said Andrews was unhappy with her job and unlikely to have stayed there, or at any like institution, had the incident not occurred.

Justice Duncan McMeekin said but for the chair fall it was unlikely the car journey would have caused the condition to become symptomatic. But that did not mean the symptoms destroyed her capacity to earn a living.

"It is impossible to avoid the conclusion [her] perception of her difficulties is substantially in excess of any objective evidence," he said. He added that Andrews had appeared to sit comfortably during cross examination, and she would appear to be capable of sedentary employment. **He awarded Andrews damages of \$334,766, less \$63,526 for special damages already paid by Westpac.**

Comfort rating in furniture: an objective assessment draws nearer

There's a lot of talk these days about so-called comfort index ratings on furniture, and in particular, for chairs. Comfort ratings are being used as a marketing tool to help sell furniture, regardless of whatever other attributes the furniture may have, for example, whether it has been tested and certified to do a certain job.

As AFRDI sees it, most attempts to produce comfort index ratings based on the responses from experimental subject populations are highly subjective and lack real meaning. Here's why:

- Typically, these types of surveys are not conducted by scientists, and
- The variation between personal responses for any population surveyed about comfort is very large.

Thus subjects that represent similar anthropometric measures (exterior measurements of the human body), e.g. body mass and stature, will not necessarily respond in a similar manner to questions about comfort. This is due to age, gender, physical fitness, health, genetic predisposition etc, variation in actual position of sitting and to 'personal preference', e.g., a subject may simply prefer 'hardness' to 'softness' on impact, that's to say the initial impression gained when sitting down.

Many subjective comfort rating surveys are taken with small and not statistically significant subject samples, and therefore the results cannot be considered scientifically reliable. When subject samples are greater than a statistically acceptable small number sample, i.e., usually greater than 30 subjects, the variation in responses due to physical differences and personal preferences of the subjects usually confounds the statistical results and renders them somewhat unreliable.

This is not to say that a 'comfort rating' cannot be – in theory - derived reliably in a subjective manner.

The parameters though, for such a test are not met with the studies we know in the scientific literature.

Such a subjective rating test would require an exceptionally large and varied experimental population of subjects to statistically cover the variations known to exist and caused mainly due to physical differences and 'personal preferences'. The study would need to be exceptionally supervised for quality assurance of the reliability of postures to be measured.

Within the scientific ergonomics and anthropometric literature, there currently exists only notions of what comfort really is.

The scientific literature is rich with objective studies that attempt to improve our knowledge by undertaking various physical measurements of the human body and its inter-action with furniture.

These studies are beginning to form the scientific notion of what objective comfort might possibly be. The application of objective science in the quest to define comfort has moved to a technique of 3-D body scanning of individuals and pressure mapping (the distribution of pressure at the interface between a human and a surface).

These techniques are developing fast, but there is not yet sufficient data available to form a reliable position about the values derived.

What is clear is that these techniques may help to develop an understanding of the relationship between subjective ratings of perceived comfort and objective measurement of shape and deformations (how the body and the furniture actually deform and interact).

The relationship between deformation and pressure distribution requires further exploration. Future development of these techniques should lead to analytical tools which may once and for all remove the need for subjectivity in assessing what really constitutes comfort.

Standards Development Meeting at AFRDI

A meeting of Standards Australia committee CS-088 was held at AFRDI in February.

The committee commenced a review of AS/NZS 3813:1998, plastic monobloc chairs.

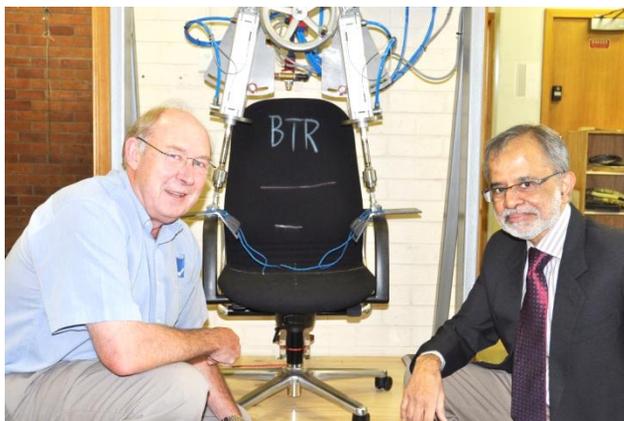
This project has been approved by Standards Australia in a recent round of project prioritisations.

Recent visitors to AFRDI

AFRDI doesn't open its doors to all-comers – there are simply too many confidential projects and products on hand at any given time.

But the door is open to clients who have a special interest in the work that AFRDI does. This was the case recently when 14 visitors inspected the laboratory. Of particular interest was the range of testing done towards the awarding of AFRDI's Blue Tick, and an explanation of the steps to be taken in gaining AFRDI Green Tick product certification.

The group was also shown the additional level of testing to which chairs are subjected in order to gain certification under the AFRDI 142 Rated Load Standard.



AFRDI CEO Bob Panitzki with R.K. Shankar, Managing Director of Mercury Manufacturing Co. Ltd, of Chennai, India. Among other products, Mercury makes filing cabinets and compactus systems which are sold on the Australian market. The machine at the rear simulates the loading that occurs on chair arms when the occupant arises. MORE PHOTOS page 5.

AFRDI hosts board meeting in Launceston



L-R: Brian Carr, Joe Mimmo, Dane Walsh, Tony Rogers, Ken Payne, Ben Wortley, AFRDI Technical Manager Ian Burton, deputy chairman Mark Copperwaite, AFRDI CEO Bob Panitzki. Absent: chairman Peter McCutcheon, Sezer Tekbas, Martin Bloder, Jared Barton.

The meeting considered a range of issues, including standards development, testing machine development, and policy review.

IKEA executives visit AFRDI



Executives from IKEA were recent visitors to AFRDI's laboratory in Launceston. Discussions focused on compliance issues for the Australian market, with the IKEA personnel also giving an outline of the immensity of the company's international operations – IKEA currently employs 130,000 people.

L-R: Dr Lee Bowkett (AFRDI, team leader, Sustainability), Jorgen Rask (IKEA's product laws and standards division), Maria Lomax (IKEA Sydney), Ian Burton (AFRDI technical manager), Jens Ekwall (IKEA's product laws, toys and standards division), Richard Levett (AFRDI, team leader, cots and bunks).

Stability Testing Information Kit Out Now

AFRDI has released an information kit on testing the stability of domestic furniture based on AS/NZS 4935.

The objective of the standard is to assist in reducing the probability of furniture items tipping and resulting in possible injury or death, particularly in the case of children. Furniture covered by the standard includes free-standing chests of drawers, wardrobes and bookshelves and bookcases.

The kit includes a design guide comprising a list of simple qualitative design principles, each conducive to product compliance.

Successful products will be certified under AFRDI's Orange Tick program.

Myth busting– you don't have to get AFRDI Blue Tick before you get testing done for AFRDI Green Tick

There would appear to be a degree of misunderstanding in the marketplace about some of our requirements for awarding AFRDI Green Tick certification for sustainability.

First, the belief that AFRDI Green Tick testing must be preceded by AFRDI Blue Tick. **This is not so.** It is however likely that many items produced by some manufacturers will have previously been tested by AFRDI to Blue Tick.

Providing there has been no change in product specification, that certification remains valid, subject to its currency.

Alternatively, product submitted for AFRDI Green Tick certification may have been tested by another accredited testing laboratory, with fitness for purpose (strength and durability) testing. This would be acceptable to AFRDI, provided that:

- the testing is current (done within the last three years),
- any test certificates are in your company's name, or if not, that permission has been formally granted by the owner(s) for you to use them for this purpose,
- the laboratory accreditation organisation is recognized by NATA's Mutual Recognition Arrangement, and
- that the lab's scope of testing included those sections accounting for strength and durability.

Another possible path to prove fitness for purpose is where furniture has been tested to another standard where strength and durability testing are included, providing the dot points above are satisfied, and that the standard is acceptable to us.

Lastly, if no evidence of fitness-for-purpose testing (strength and durability) can be provided, appropriate testing will be required, either by AFRDI, or by an appropriately accredited laboratory.



Green Tick
Product
Certification

Visitors at AFRDI



During a recent visit to AFRDI by furniture manufacturers and distributors, CEO Bob Panitzki explains the working of a testing machine in the laboratory.



Team Leader Peter Wilson (second from left) discusses testing procedures and outcomes with Phil Noblet (left), Brett Parkin and Ian MacDonald (right).

