Suite of tests recognizes changing needs in society

AFRDI Standard 151, a Standard for Rated Load testing of fixed height chairs and seating.

The name itself doesn't raise an immediate sense of excitement, but the content embodied in the Standard should be of vital importance both to producers of fixed height seating and consumers who use these chairs.

Let's unpack the above statement a little. Traditional testing of fixed height seating assumes that chairs which pass will be suitable for users weighing up to around 110kg for Level 6 (severe commercial) and 100kg for Levels 4 and 5. Rated Load testing, in general, is a response to the recent increases in both human height and weight, to the point where people who might 30 years ago have been considered statistical outliers are now relatively commonplace.

Rated Load testing, in short, leads to more robust products. It does this by testing at a series of levels, starting at 135kg, and progressing through 160kg, 185kg and, for bariatric use, right out to 300kg.

While the 'upper reaches' of the Standard will only apply to a relatively small number of chairs, testing at 135kg is already assuming a considerable importance. The reason is simple – the Standard takes a position that when providing public seating in a restaurant, a library, or a shopping plaza - it's just about impossible to determine who will sit where.

In other words, all the seating needs to be able to safely accommodate heavier than normal people if there is to be a meaningful attempt to provide safe furniture free from sudden collapse to nearly all users.



Australia, like the United States before it, is entering an era where accidents occasioning personal injury almost invariably bring on claims of payment for liability. A sensible approach to avoiding such claims is to specify seating which has a greater innate ability to resist sudden collapse or breakage through use, or indeed, abuse.

Like what has occurred following the introduction of the preceding AFRDI Rated Load Standard for swivel chairs, or gas-lift office chairs, a new breed of chairs is emerging which satisfy the entry point testing for AFRDI Standard 151. Some are aiming even higher.

And in what must seem like getting something for nothing, Rated Load testing costs very little more than standard testing, the 25% additional cost reflecting additional time spent on testing machines, coupled with a more extensive battery of physical tests.

A word of warning, though. As AFRDI experienced when Rated Load testing started on swivel office chairs, a chair qualified at traditional testing levels will not necessarily successfully pass testing at more elevated levels. It calls into question the common marketing practice of giving higher 'load ratings' to chairs than the levels at which AFRDI tested them.

In summary, AFRDI believes most fixed height seating that's going to be used in a public environment should be Rated Load tested, to protect both the supplier and the user.

August 2015

