

# Last line of defence



Having access to the best fall arrest equipment will not ensure the safety of those working at heights. While the equipment is a critical component of overall safety, it's also essential for workers at height to know how to use these systems properly.

Australians are in the fortunate position of having access to some of the very best fall arrest equipment in the world, says Gordon Cadzow of the Fall Protection Manufacturers Association of Australia (FPMA).

He believes that while occupational health and safety standards for working at height are similar in developed countries the world over, the Australian Standards for Height Safety equipment are well known to be the most rigorous in the world.

This situation has come about because the Standards Committee takes into account the views of all major players — manufacturers, professional end users, training organisations, industry associations and unions. And it also results from the study by this committee of other global standards and accident reports to quickly incorporate new findings into the standard.

“For instance, the Australian standard includes an ultraviolet (UV) degradation test for webbing, as UV degradation has been exposed overseas as a limitation on the safety product over time,” Cadzow says. “Under Australian standards, a

much higher quality of webbing has to be used to protect against degradation.”

When you take into account that the test regimes in the Australian Standard are also significantly higher than overseas, Cadzow sees better designed and higher quality products in Australia than anywhere else in the world. In fact, products that are manufactured to European, Asian or American standards would not pass the Australian requirements.

## Survival training

According to Cadzow, if there is one area that the Standards fall down on, it is operator training. The best equipment will still be useless if it is used incorrectly by an inexperienced or untrained operator.

“Part of the training has to cover equipment inspection prior to use and the enforcement of the ‘tag out’ system if any fault is suspected,” Cadzow says. “We are not dealing with toe protection or eye protection here (important as they are). As far as fall protection is concerned, it is at the bottom of the Hierarchy of Control. If the person or



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To combat this, Cadzow points to one of the key functions of the association he represents, which is that the Standard needs to incorporate mandated, certified competency-based training for anyone required to work at height.

This opinion is echoed by Emmett McGregor at Capital Safety Solutions. McGregor holds the official title of marketing and technical support manager at this manufacturer of fall arrest systems and the unofficial title of ‘height safety guru’.

He also advocates competency-based certified training for those working at heights and explains in more detail the Hierarchy of Control: “When dealing with a hazard (working at height), the three levels to go through are eliminate, prevent and reduce the hazard.

“For example, a major challenge for factories is to change light globes. To eliminate the hazard, you can buy a light-globe changer. You stay on the ground to change the globe and eliminate the need to go to height altogether.

“A preventative measure would be the

installation of a barrier system such as a guard rail. In this instance, the hazard is still there.

“The use of a fall arrest system is always the last resort, as it doesn’t eliminate the risk, it just reduces it.”

This is why it is so critical for employers and employees to be trained to use their equipment accurately. McGregor also points out that you can still get hurt using the best fall arrest system correctly as there is a huge amount of force placed on the body with a fall.

The reason that experts such as McGregor and Cadzow lobby hard to influence Australian Standards of equipment and training is that there is still a long way to go in ensuring the safety of every Australian working at height.

According to McGregor, height-related accidents remain the highest killer in construction worldwide and are second only to traffic accidents in industry overall. “The current legislation requires training, but doesn’t specify the extent of the training. There is a wide range of training available.”

Cadzow says operator training is one of the key issues the FPMA is cur-

rently focusing on. While the Australian Standards are specific in outlining the best possible product performance and testing, that is where the control in the process finishes.

“It is amazing to think that people are required to have licences to drive forklifts, be certified to change electrical plugs or to install a telephone and yet people are allowed to work at height without proper training and certification,” he says.

“When an accident occurs, the finger of blame generally points to the manufacturer of the product when this is not necessarily the case. In the marketplace we regularly see products used in completely wrong applications and misapplied. Frequently we see products in use that should have been tagged out of service due to age or wear. These are all operator training issues.”

According to McGregor, training needs to be more than just ‘how do I put on a harness?’. “Our core training courses can run anything from four to 40 hours, and we take the view of training for education, not just compliance. Too often, manufacturers’ courses are about selling products and are not based on education

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— getting workers to want to wear the gear,” he says.

He also points out that training is a critical part of due diligence: complying to the legislation and standards will not be enough to protect employers in a court of law. Training becomes critical when it can be documented that it was undertaken to promote education and competence.

### Tailor-made safety

Another challenge in ensuring the safety of workers at height is combating the mindset that there is one solution to suit everybody.

As McGregor points out, the technology of harnesses is so advanced that every individual needs a harness adjusted specially for them, as the best technology will only be effective if it is on the body properly.

Many employers would prefer the idea of a universal harness that could be used by everyone. But this scenario usually sacrifices both comfort and adjustment.

According to McGregor, there also needs to be a shift in perception from those who will ultimately be wearing the harness. “Users need to understand what the harness is for and what will happen to them when they fall. Then they will care about what harness they are using and fitting it properly. If they don’t understand, they’ll pick up anything and put it on.

“Most people that wear a harness on a daily basis probably have about 30 mins of training and are just given a harness in a ‘medium’ size. And how many people are a medium?”

The question then has to be who is actually responsible for ensuring workers are firstly equipped with the correct harness for their body type and are then using it properly?

Cadzow maintains that there is certainly a duty of care responsibility with the employer. And if the employer isn’t the one making the ultimate purchasing decisions, then does that duty of care extend to the purchasing officers?

“This would require somebody to specify the correct product configuration for the job and for the purchasing officer to purchase the correct equipment to the correct standard, rather than make purely commercially-based decisions,” Cadzow says.

Unfortunately the issue doesn’t finish here, as Cadzow then poses the following question: “Who is qualified to assist the business owner to make the decision on the correct equipment for the job and the standard of operator training and certification required?”

He answers his own question by suggesting that most manufacturers are capable of assisting with the equipment selection decision. Some may even be able to undertake the training and certification themselves, while others will be able to recommend accredited training companies.



However, some manufacturers sell through independent distributors and there could be a concern as to the level of competency among distributor staff when it comes to product selection.

It is for reasons such as these that both Cadzow and McGregor are adamant that higher levels of training and certification be introduced as part of the Australian Standard. Even the best tools of the trade are only as good as the knowledge of how to use them.

### Top five tips for fall protection

Emmet McGregor shares his top five tips to staying safe when working with a fall arrest system at heights.

1. Choose your fall protection equipment like any other tool. Ensure it fits the task you need it for.
2. Always check your gear before you use it. Remember, it’s your life that is on the line.
3. The amount of force you generate in a fall is always greater than you would expect. Make sure what you’re connected to meets the legislative requirement of 15 kN or the approximate weight of a four-door sedan.
4. Common sense is a learned skill. Knowing what fall protection systems, techniques and equipment to use and how to use it comes from proper training and education programs.
5. Always follow the hierarchy of control and ask three questions. Can I do this job differently so I don’t have to go to height? Can something be done or put in place to keep me from going over the edge? Lastly, what do I need to protect me if I do go over the edge so I don’t hit the ground or something below me?