



**Introduction of LVV Standard 45-60(00)
 (Disability Transportation Systems)**

Introduction:

The purpose of this LVVTA Information Sheet is to introduce, and comment on, for the benefit of LVV Certifiers and other interested persons, the newly-released LVV Standard 45-60(00) (Disability Transportation Systems).

Development & consultation process:

This LVV standard has gone through the lengthiest and most difficult consultation and review process of any low volume vehicle standard ever developed. It is common for an LVV standard to take two or three years to develop, however the Disability Transportation Systems Standard has taken nine years to go from first draft to sign-off, involving a total of 12 drafts, 10 external consultation processes, and 8 industry meetings. There are two reasons for the unusually long period of time taken:

- Whereas nearly all other LVV standards are entirely engineering-based and mechanically-based technical documents, this standard has had to also take into consideration the ‘human’ aspects of the disabled community, their care-givers, and the occupational therapists and other health professionals that become involved with them, along with the complex issue of balancing concessions to safety against disabled people’s basic needs and rights for mobility.
- This standard applies to a very competitive market-place where many of the experts involved (who we needed to have involved within the consultation process that has taken place) have commercial agendas and vested interests, and it has been a long and difficult process to circumnavigate those influences, and focus on identifying the solutions that disadvantage the needs of the disabled users by the least amount.

The standard has just this year reached a point where LVVTA and the New Zealand Transport Agency are satisfied that it addresses the key safety issues at the heart of the disability transportation sector, without imposing unreasonable costs and constraints to users, and families of users.

Effect date of the standard:

It is important to note that the standard has an unusually long lead-in time, and does not actually take effect until 1 March 2013, so as to provide a six-month lead-time for vehicle and equipment importers and manufacturers, and to enable everyone to gain an understanding of what the requirements are prior to implementation of the requirements contained within the standard.



However, while the standard doesn't come in until 1 March 2013, LVV Certifiers will still be LVV certifying disability vehicles, and should use the standard as a benchmark in assessing general safety requirements. For example, a goods hoist used as a wheelchair hoist will need to be inspected, and may be deemed not fit for purpose for many reasons, including that the load rating will be different due to the higher safety factor that should be applied to a wheelchair hoist.

General approach of LVV Standard:

Because of the high degree of opposing views and conflict within the sector, it would seem that no outcome will satisfy everyone in the industry and disability transportation sector. The fact that both local manufacturers and importers exist within the industry means we're probably never going to see everyone with an interest in the subject on exactly the same page.

The general approach that LVVTA has taken with the standard, therefore, is to minimise any potential adverse affects on the users, who, at the end of the day, are LVVTA's principle concern.

An over-riding philosophy has been applied in the standard's development to ensure that disabled people and their care-givers are not adversely affected by unreasonable costs and unnecessary complexity, which has been carefully balanced against a desire to ensure that the highest practical level of safety is available to the end users.

Key issues:

There are a number of key issues that have been changed this year, as a result of very good feedback from LVV Certifiers during LVV Certifier training sessions throughout the country late last year. Because some aspects of the standard differ from that which was covered during the training, the key issues are touched on below.

- Scope of the standard

The scope of the standard has been changed to provide a later application date than originally planned, so as to minimise the impact on users as much as possible. The application dates are based on the effect dates of the Transport (Vehicle Standards) Regulations 1990 for Seats and Seat Anchorages, which vary between vehicles with 9 seating positions or less, and vehicles with more than 9 seating positions.

The standard now applies to vehicles with 9 seating positions or less that were fitted with disability transportation equipment or systems on or after 1 January 1992, and vehicles with more than 9 seating positions that were fitted with disability transportation equipment or systems on or after 1 March 1999.

- Vehicle & Equipment Safe Working Load

One of the big changes in the final version of the standard from previous drafts is to set a 'Vehicle & Equipment Safe Working Load' (VESWL) rating. Earlier methods of attempting to achieve this proved to be overly-complex and problematic, however a simple solution is now in place to enable an LVV Certifier to set a VESWL rating for each vehicle he LVV certifies, from which a prospective purchaser or occupational therapist or any other interested person can use to base his or her decision as to whether or not the vehicle is suited to his or her application.

In particular, the combined mass of the person being transported in the wheelchair and the wheelchair itself is established, and all factors will be displayed by a highly-visible labeling system.

The VESWL process will also ensure that the vehicle or equipment is not over-loaded.

- Safe Working Load ratings for wheelchair restraint straps

Safe working load ratings for wheelchair restraint straps have been re-introduced, and in fact require labeling to ensure that, particularly in vehicles where more than one set of restraint straps are used, the correct restraint straps are used for each wheelchair, which may vary in mass.

LVV Certifiers will be required to provide to LVVTA the load rating for any straps that are not permanently marked by the strap manufacturer, and LVVTA will produce labels back to the LVV Certifier to fit to the straps.

- Wheelchair restraint system anchorages

An LVV Certifier must be satisfied, through either documented evidence or thorough visual inspection and assessment, that every wheelchair anchorage used to secure a wheelchair into a vehicle, is capable of supporting the safe working load rating of the wheelchair restraint system that is attached to it.

This means, wherever possible, the LVV Certifier should establish that the safe working load rating of the anchorage is at least as high as the safe working load rating of the wheelchair restraint strap that is attached to the anchorage.

In summary:

LVVTA recognises that the introduction of this standard represents a big change in the way that the industry and LVV Certifiers are involved in dealing with vehicles that transport disabled people, as we move from no requirements at all to a fairly comprehensive set of safety requirements.

LVVTA recognises that there will be a period of learning for all parties involved - LVVTA included - and that changes and improvements will need to be made to the LVV standard as time goes by, in order to get it as right as it can be. This is one of the benefits of LVV standards as distinct from Land Transport Rules; whereas a rule can take a year or two or three to change, LVVTA can - with the support of NZTA - respond to situations and make changes in a matter of months, particularly where safety-related situations exist.

LVVTA encourages LVV Certifiers and the industry to provide feedback on how the introduction of this standard goes.

For any further information or clarification on this information sheet, please feel free to contact either LVVTA Technical Team Member Justin Hansen or Dan Myers at the LVVTA office.

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