

Fact sheet – ISO container permits

Issued June 2013

Key messages

The NZTA is working directly with operators using trucks carrying import/export ISO containers on Overweight Permits to help them comply with legislation that has been in place since 2002 to address a vehicle rollover risk. Trucks carrying import/export ISO containers rolling-over poses a significant safety risk for road users, including to the drivers of container trucks.

- We're taking these pro-active steps to allow operators to meet the regulations with minimal disruption to their businesses.
- A key action will be for operators to provide us with evidence that their truck or trailer can safely handle the load carried where it is difficult to tell how a customs-sealed import/export container has been packed.
- Recent concerns raised by NZ Police have prompted us to ensure compliance with the mandatory static roll threshold (SRT) requirement for all Class NC vehicles (goods service vehicles with a GVM over 12 tonnes) or Class TD vehicles (trailers with a GVM over 10 tonnes). This focus is geared to help prevent future incidents.
- Legislation sets out specific steps that are designed to assist affected operators and NZTA staff when ISO Container Overweight Permits are required. Our local permitting issuing officers are available to advise operators on the options they have to ensure compliance.
- Meeting the mandatory SRT threshold for your vehicles will ensure you meet your legal requirements and save on the significant cost impacts of vehicle rollovers on your business.

Questions and answers

1. What is this all about?

There is a requirement in New Zealand that heavy motor vehicles achieve a minimum level of rollover stability (SRT) of 0.35g (g refers to gravity) as defined in the Land Transport Rule: Vehicle Dimensions and Mass 2002 (the VDAM Rule). To ensure safety, we need evidence that the truck or trailer can safely handle the load carried where it is difficult to tell how it has been packed.

2. Why is this important?

The Commercial vehicle Investigation Unit of NZ Police (CVIU) have alerted the NZTA that the regulatory requirements for Static Roll Threshold (SRT), as defined in the *Land Transport Rule: Vehicle Dimensions and Mass 2002* (the VDAM Rule), were not being met by some operators of trucks using overweight permits moving ISO shipping containers. Lack of SRT compliance presents a significant road safety issue for both drivers of these trucks and other road users due to the higher probability of these vehicles rolling over.

The SRT of a vehicle is a measure of the potential for that vehicle to roll-over while travelling. Vehicles with a low SRT (below 0.35g – g being gravity) are more likely to roll over than those with a higher SRT (those 0.35g and above). The lower the SRT, the less stable a vehicle, especially when turning sharp corners and during emergency manoeuvres such as sudden lane changes.

Previously the NZTA has issued overweight permits to operators of ISO Container trucks on assurances that these vehicles were being operated within the legal SRT requirements for mass and height. This reflected the fact that it is the permit holder's responsibility to operate within the regulatory requirements relating to SRT, as well as other conditions detailed in the permit or legislation. This includes ensuring the SRT of the vehicle is calculated appropriately depending on what the vehicle is carrying and how it is loaded.

As a result of the concerns raised with us by the NZ Police and in the interests of improving road safety for all road users, permit issuing officers (both internal NZTA staff and external contractors) have now been directed to check for SRT compliance when issuing any new overweight permits for trucks carrying ISO containers.

Additionally, holders of existing overweight permits for ISO Container trucks have been requested by the NZTA State Highway Managers to provide confirmation that their currently permitted vehicles are SRT compliant.

3. What is SRT?

The static roll threshold (or SRT) of a vehicle is a measure of the potential for that vehicle to roll over sideways. Vehicles with a low SRT are more likely to roll over than those with a higher SRT, especially when going around sharp bends and in sudden emergency manoeuvres. That means the lower your SRT the less stable your vehicle is.

4. What is a Uniform Density load?

A Uniform density load is a load where the weight is uniformly distributed between the load bed and the top of the load, so that the centre of gravity of the load lies midway between the load bed and the load height.

5. Who is affected by this?

Companies carrying import/export ISO Containers on Overweight Permits from the NZTA.

6. Is this about a rule change?

No it's not. The need to comply with the mandatory SRT requirement has been in place since the VDAM rule was introduced in 2002.

7. Why is this an issue now?

NZ Police have raised concerns about the stability of some trucks carrying import/export ISO containers loaded to near maximum weights, and their compliance with the mandatory SRT requirement. These vehicles have a higher risk of rolling over, and this poses a risk to other road users.

8. Are vehicles on High Productivity (HPMV) Permits affected

No, but vehicles on HPMV Permits also have to meet the mandatory SRT requirement in the VDAM Rule.

9. I have a quad axle truck and quad semi carrying containers at 44t. I don't need a permit, but does this affect me?

All Class NC vehicles (goods service vehicles with a GVM over 12 tonnes) or Class TD vehicles (trailers with a GVM over 10 tonnes), whether laden or unladen, must comply with an SRT of at least 0.35g. As long as the vehicle is being operated within the general (legal) mass limits and your combination is SRT certified to at least 0.35g for the loads being carried it will be unaffected.

10. The VDAM rule (schedule 1) says for general freight and containers it is assumed that load is not uniformly distributed. Given this, why should vehicles be certified for uniform density?

Where the loads to be transported are mixed freight then certification for mixed freight loads is appropriate. However, if a container vehicle is certified for mixed freight and is then loaded with a uniform density load such as fruit or powdered products, the risk of exceeding the SRT is significant.

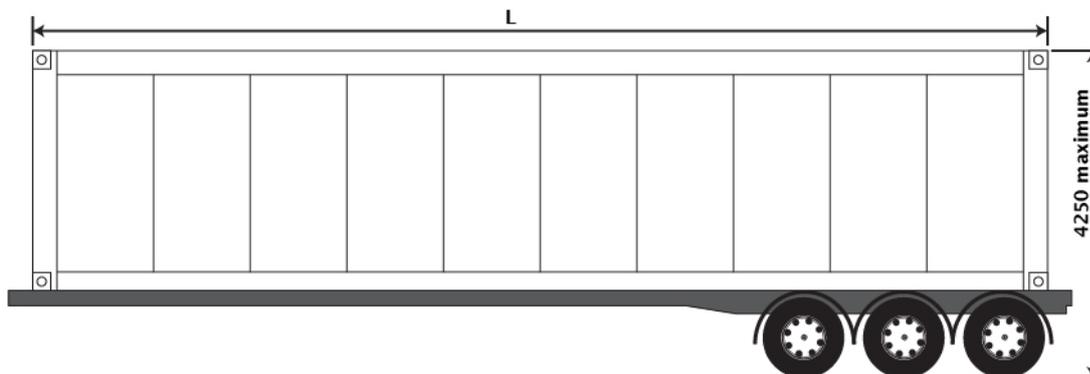
For calculating the SRT the VDAM Rule states that the payload centre of gravity height is calculated from the load bed height, the load height and the type of load. Where the type of load (either uniform density or general freight (mixed load)) is known, this can be factored into the calculation without the need to make an assumption about the load type.

For the purposes of issuing permits it is appropriate, for the NZTA to request that container trucks are certified for the worst case scenario (Uniform Density) for the SRT calculation as this approach better manages the risk of exceeding SRT if the vehicle carries uniform density loads. This certification also offers the operator maximum flexibility because the vehicle can safely carry both uniform density and mixed freight loads.

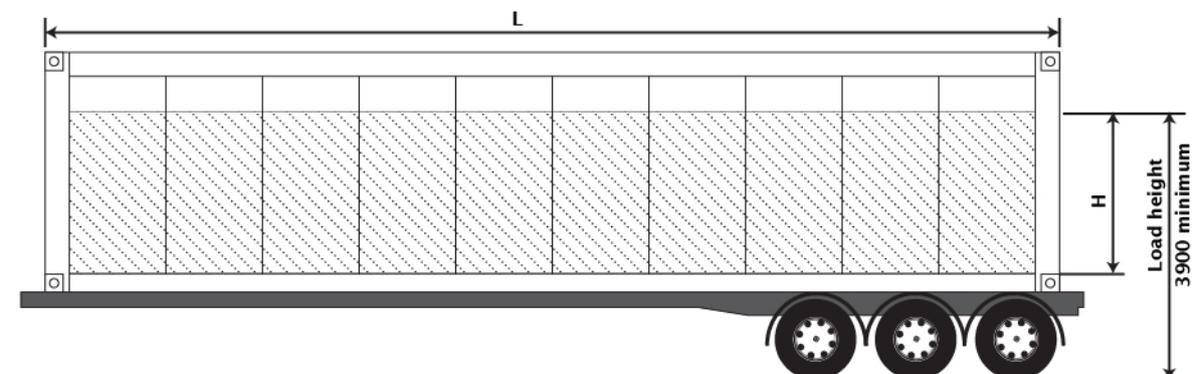
11. What do I have to do now?

Make sure your vehicles using overweight permits are correctly certified for SRT using one of the four options below

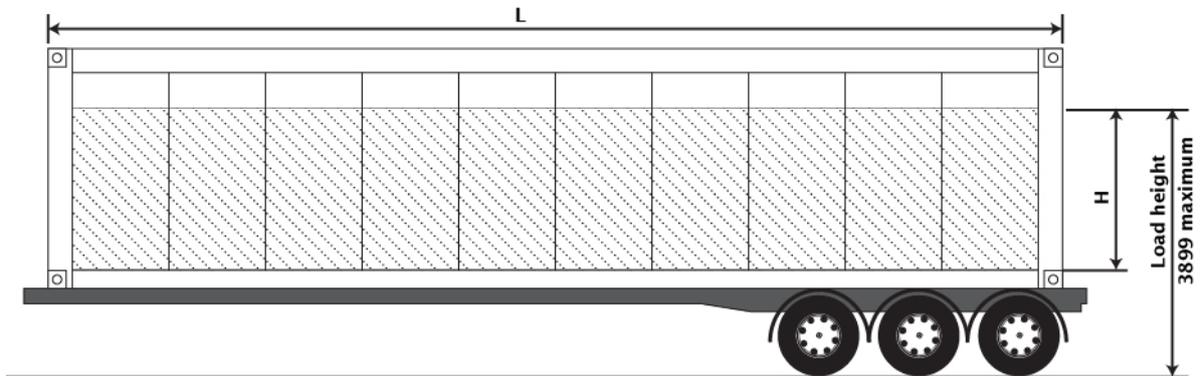
- Option 1 - Uniform Density SRT at a maximum load height of 4.25m (This must be used for vehicles carrying import containers)



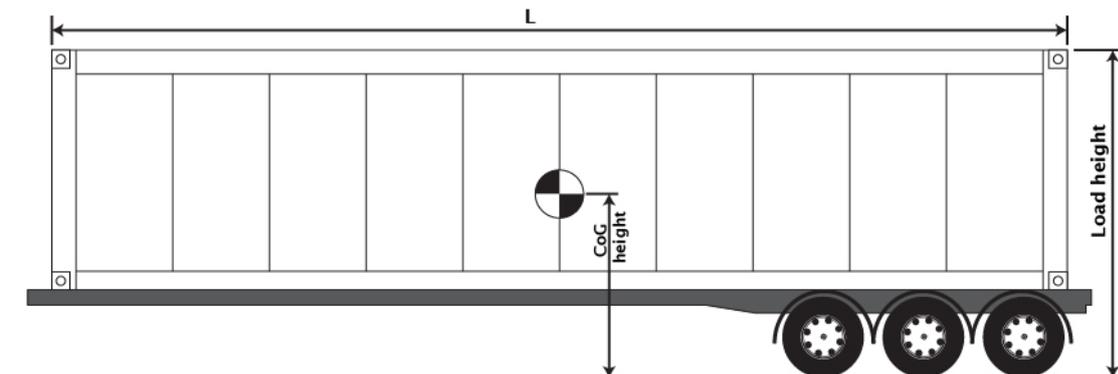
- Option 2 - Uniform Density SRT at a load height of 3.90m or greater



- Option 3 - Uniform Density SRT at a load height of less than 3.90m.



- Option 4 - Other SRT for swing-lifter/side-lifter trailers



12. My vehicle meets the Uniform Density SRT but I don't have the original SRT Compliance Certificates to prove it. What do I do?

Any operators renewing their permits who cannot prove they meet uniform density SRT have been given temporary permits, with a speed reduction requirement on corners to mitigate risks. This allows time to get trucks certified, or to locate the original SRT Compliance Certificates.

We recognise the importance of keeping freight moving. We'll work closely with the Road Transport Forum and individual industry operators to assist those with vehicles carrying import/export ISO containers using overweight permits to meet the legal SRT requirements.

13. My vehicle meets Mixed Freight SRT. Can I use that for carrying containers on overweight permits?

No. Mixed Freight SRT can be used for import/export ISO containers operating within the general (legal) mass limits, but vehicles operating on NZTA Overweight Permits must be certified using one of the four options listed above.

14. Who can I talk to about this?

Your local permitting issuing officer is available if you need to discuss your options. Their email address is available on our website: <http://www.nzta.govt.nz/vehicle/your/hpmv/apply.html>

Background information

- ISO containers are used for imports and exports. If carrying one makes a vehicle overweight, these containers must be carried using an overweight permit.
- Permits are issued for the state highway network by the NZTA under the authority of the Land Transport Rule: Vehicle Dimensions and Mass 2002.
- The permitting procedures are designed to ensure the safety of the public and people working in the road transport industry, and to protect infrastructure from damage.
- The problem is compounded because often the container is already packed and sealed when the truck collects it and the driver does not know how the load is distributed inside the container. Similarly, enforcement officers cannot easily see the load distribution.
- In response to the rollover risk for trucks carrying ISO containers, the NZTA is working closely with the industry to mitigate the potential safety risks to drivers and other road users.
- These procedures reflect a dual focus on improving road safety and avoiding significant disruption to freight movements.