Load Restraint "The Basics"

Compliance and Enforcement (C&E) legislation (also known as "Chain of Responsibility") requires that appropriate load restraint equipment and training are provided and that loads are correctly restrained to the "g" forces specified by law.

Under C & E legislation, all parties in the supply chain have responsibility.

Contrary to popular belief there is often a greater chance of losing a load when braking at low speed as it is easier for the brakes to grab or cornering at low speed (especially roundabouts) which can generate high "g" forces.
Most load restraint incidents occur at 40-60 Km/hr in city areas and only after a short distance.

The law (CoR & OH&S) requires that,

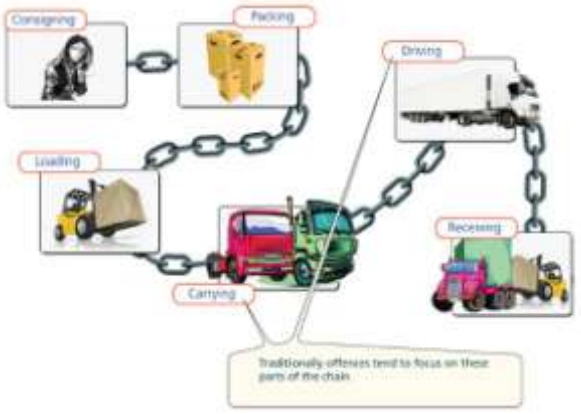
- Loads must be restrained to prevent unacceptable movement during all expected conditions of operation.
- Loads must not be placed in a way that makes the vehicle unsafe or unstable.
- Loads must be secured so that it is unlikely to fall or be dislodged from the vehicle (not just whilst in transit but also during unloading i.e. OH&S; duty to provide a safe workplace and systems of work).

Therefore,

Ensure you have a copy of the Load Restraint Guide (second edition 2004) and ensure that you understand and apply the obligations of the Guide as well as any other relevant State regulations.

Compliance basics,

- Choose a suitable vehicle.
- Position the load correctly.
- Use suitable restraint equipment.
- Provide adequate load restraint.
- The load restraint system must meet the regulations "Performance Standards" as specified in section "F" of the load restraint guide.



Choose a suitable vehicle.

- ✓ Gates locked to mezzanine floor, bulkhead and vertical roof supports.
- ✓ Gates high enough to stop the load coming over the top of them.
- ✓ Freight on bottom deck "contained".
- ✓ Load binders (winches) fitted to both sides of trailer,

Position the load correctly.

- ✓ Specialised load restraint system to secure roll cages.

Use suitable restraint equipment.

- ✓ System locks into floor and roof preventing any movement

10 Technical Tips

1. Rope is only suitable for very light loads.

   ("*Ropes are for dopes*") *Use webbing*!

2. Understanding the contribution that friction makes to load restraint and how to increase it is very important.

   In a typical situation about half of the braking force is resisted by friction alone.

3. Increasing friction is the most economical means to improving load restraint.

   Proper anti-slip matting increases the friction by 50% over timber.

4. Oil, grease or multiple layers of plastic, on cargo and floors can dramatically reduce friction.

   A slippery deck typically requires three times as many restraints!

5. Blocking and containing are effective ways in achieving load restraint.

   This means using strong headboards and gates.

6. Consignors should ensure all packaging will withstand stacking and restraint forces without crushing the cargo and losing tension in the restraints. Consignors should consider how to increase the friction between layers of cartons on a pallet or wrap the pallet to restrict movement.

   If this is not possible, then a "containment" method should be used.

7. Lashing anchor points must have adequate design strength.

   Anchor chains at vertical post on the rope rail, clip webbings just behind the vertical post on the rope rail.

8. Often more than one means of restraint will be required (friction, blocking & lashing).

   You may need to use webbing over pallets even though they are behind gates e.g. if there is a large gap to the headboard to get axle loadings correct.

9. Tautliner curtains were designed to keep freight clean and dry, in their own right they are not an effective load restraint option.

10. Never leave loose items on the back of a trailer, or above the gates.

    Gates if not restrained, locked or braced may be just another unrestrained article.