



1. General details of strapping

1.1 Why strapping is performed?

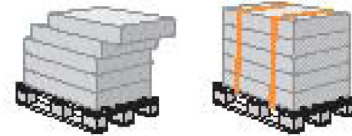
To bundle printed matter



To seal postal packets and cardboard boxes



To secure against shifting or tipping



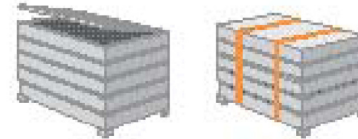
To form compact loading units



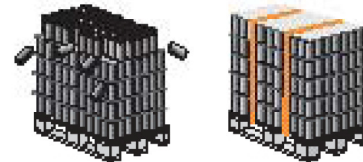
For tying up piece goods



For additional security



To secure stacked goods against falling apart





Under the **road traffic regulations**, a transported load must be secured so that it cannot endanger or hinder any person, nor drop off. Specifically this means that every load must be secured so that displacement is prevented under normal driving conditions.

Important: Methods of transport are manifold – fork lift trucks, trucks, railway, ships, aircraft. The same refers to the stresses and hazards resulting from the method of transport!

In addition to protection during transport, strapping also offers a certain **protection from theft**.

Our tip: obtain advice from an expert before purchase !





1.2 Strapping to supplement other systems

Gluing and stitching

It is not always sufficient to secure cardboard boxes and cartons for transport with adhesive tape and/or staples. Heavy goods for example. But also when there is a danger that the cardboard packing can be damaged by mechanical forces such as shocks or by environmental influences such as moisture.

Additional security is then provided by supplementary strapping.

For postal packets and cartons the strapping also often acts as a carrying aid.



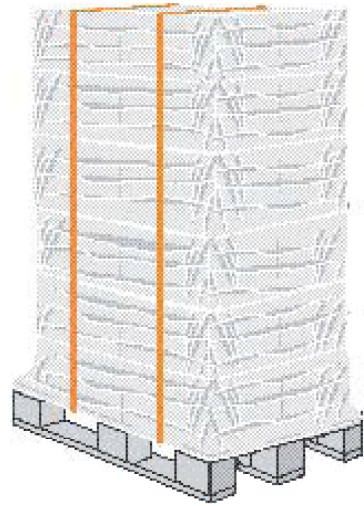


Stretching and shrinking

With **stretching**, a palletised load is wrapped in an expandable film for security.

With **shrinking**, a cover of plastic film is placed over the load and the whole exposed to the effect of heat. The film shrinks to provide a skintight wrapping for the load.

Both processes are used to **secure unstable loads** for the handling and transport. The stretch and shrink film is also intended, however, to offer **protection against dust, influences of weather and theft**. For highly unstable pallet loads, such as empty cans or heavy palletised goods, such as paper sheets, strapping offers **additional stability**.

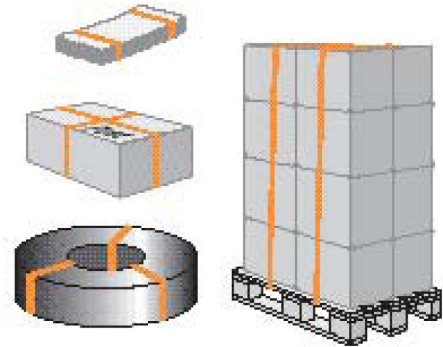


1.3 Vertical and/or horizontal strapping ?

Vertical strapping only

The most frequent type of strapping, e.g.

- For printed matter, including newspapers, magazines, mailing bundles, etc.
- For postal packets or cartons
- For single items
- For relatively stable, stacked goods – to secure a stable unit
- For packaging products of metal, wood, concrete, etc.



Horizontal strapping only

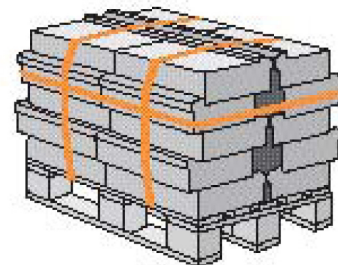
For special cases, e.g.

- In the building materials industry for securing heavy, stacked goods and if transport is only over short distances
- For transporting fruit and vegetables containers – together with edge protection sections – to keep stacked items together



Combined vertical and horizontal strapping

Used for example for stacked goods in the building materials industry. Horizontal strapping then acts as additional protection against falling apart.





1.4 Mobile or stationary strapping?

Important factor for purchase!

If strapping is necessary **at various places in the company**, light-weight hand tools are most suitable.

The most modern solution: mains-independent, battery-operated strapping tools

If strapping always take place at the same point, suspension devices for the tool, strap looping devices or conveyors simplify the work. Also recommendable is strapping is often performed: pneumatic or electrically operated strapping tools.

For larger strapping volumes it is worthwhile comparing the price/performance ratio of an automatic system with that for manual strapping.

