

Reusable Tie-Down Straps/ Bands for Pallets

Overview

Stretch wrap and disposable metal or plastic bands are commonly used to contain and secure palletized items during movement and storage operations. Reusable tie-down straps and reusable bands are an economical alternative to stretch film or disposable strapping. They are quickly and easily applied by hand, eliminating the need for expensive application equipment. Their reusability makes them an attractive alternative to disposing of film and metal/plastic strapping.

One type of tie-down strap is rated by its manufacturer as having 2,500 pound breaking strength. It has high abrasion resistance and an over-center buckle that locks in tension. For pallet band applications, a stretch factor of about one and a half times the relaxed length is recommended. A variety of widths of standard circumferences are available. For rough handling situations, the use of several rows of straps or bands can provide added stability.



Once the tie-down straps or bands are removed from the pallets they may be refolded and collected in strategic locations throughout the plant for workers to reapply as needed. Pallet tie-down straps can be reused hundreds of times. On average, a worker with just a little experience with pallet tie-downs should be able to apply two tie-downs to any load in under a minute. Similarly, a worker with minimum experience should be able to remove two tie-downs from any load in less than half a minute.

Benefits

The following table compares cost, reusability, and equipment needed for three different options to secure pallet loads.

DESCRIPTION	METAL/PLASTIC BANDING	STRETCH WRAP	TIE-DOWN STRAPS/ RUBBER BANDS
Cost	\$0.30-0.70/pallet	\$0.50-1.00/pallet	Approx. \$2.00
Number of uses	Once	Once	Hundreds
Application	Need special tool	From a roll	By hand
Removal	Need wire cutter or knife to remove	With utility knife	Loosen by hand
Comments	Can loosen, crack or split	Creates a large volume of waste	Can retighten if necessary

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The initial cost of a pallet strap will be recovered in the first 2 to 7 uses in material cost savings alone. The company should realize additional savings from reduced labor and waste disposal costs.

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Benefits

For a case study of reusable pallet band use, [click here](#).

Credits: Alameda County (CA) Waste Management Authority & Alameda County Source Reduction and Recycling Board.

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