

Staple closure and environmental sustainability

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In addition to the particularly advantageous properties of fastening with staples in comparison to other types of fasteners, the fastener also offers full environmental compatibility.

The basic material of staples is iron or steel wire, which in the staple production is copper-plated or galvanized on the surface against flash rust and glued in individual pieces of wire to form staple strips.

Staples are environmentally friendly!

In terms of material, it is a natural product

that is post-treated during manufacture with paints and adhesives that are PCP-free (pentachlorophenol) and therefore harmless to the environment.



When used in cardboard boxes, which are also a natural product, they are themselves an environmentally friendly packaging material made from the main raw materials waste paper, cellulose and wood pulp.

When reused and recycled, stapled cardboard boxes guarantee that they are completely environmentally friendly

Folding boxes made of cardboard protect the contents from shrinkage and breakage, and this in the long transport chain from the sender to the recipient. Since, unlike other cardboard closures, which only superficially connect one layer of paper (wet or self-adhesive tape) or

two layers of paper (gluing), the fastening with staples is a cardboard closure that runs through all cardboard layers. With the staple closure, all paper layers of the box are firmly anchored / connected with the staples. This anchor or safety lock, which encompasses all paper layers like a claw, achieves



a high level of stability, so that in many cases a thinner cardboard quality can be used with the same stability.



Environmental benefits:

When using thinner cardboard boxes, the volume of the cardboard boxes is reduced, and the user can save considerable costs on cardboard boxes and possible disposal.



Stapled cardboard boxes can be completely unclamped with a staple puller or other aids and used again in the transport chain.

Environmental benefits:

Cardboard boxes that have been freed from staples can be reused.

The problem-free disposal of cardboard packaging without damaging the environment is becoming an increasingly important property of packaging.



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Stapled cardboard boxes are disposed of by incineration, whereby the cardboard box itself is an important and necessary source of energy. Cardboard is indispensable for waste incineration and replaces other valuable energy sources such as heating oil.

The staple in waste incineration is separated out in the residual slag and there forms an important, non-toxic mineral substance that is important for other areas of application.

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On the other hand, used cardboard boxes are ideal for recycling. The staples required for industrial edge stapling by the cardboard box manufacturer as well as the staples stapled for the box closure pose no problems whatsoever for waste paper processing.

Environmental benefits:

Staples can be sorted out easily when recycling cardboard boxes.



If stapled cardboard boxes are deposited in the landfill, they will take up garbage storage space for a short time; However, if there is an adequate supply of oxygen, they rot comparatively quickly due to their biodegradability.

Environmental benefits:

Staples on the landfill will completely rot in a few years - important, non-toxic minerals go back into the soil.

Summary:

With cardboard boxes, the staple closure helps to ensure that the environment is not polluted, as no toxic substances are released and important minerals for the soil are recovered. The closure with staples also helps to enable cardboard boxes to be reused and to reduce the volume of cardboard boxes.