

# Framing myths explained: tapes and hinges

**Mal Reynolds GCF Adv** looks at the materials and techniques required to make strong hinges that will stand the test of time

**M**ost framers see artwork on a regular basis that has been incorrectly mounted, or which is supported by hinges made from inappropriate tape. Inadequate tape is likely to fail over time, particularly if the item is hung over a radiator, so the artwork will fall down inside the frame. A nasty sticky residue may remain, which is highly acidic and hard to remove. If tape is applied incorrectly, the artwork will be put

under strain which can weaken it and result in tearing. So framers have a responsibility to use the correct method of hinging and the right tape for the job.

## What not to do

Artwork should never be attached to the back of the windowmount, but should be attached to an undermount, which is in turn taped to the windowmount along the longest side. Artwork that is attached to the windowmount is not held securely.

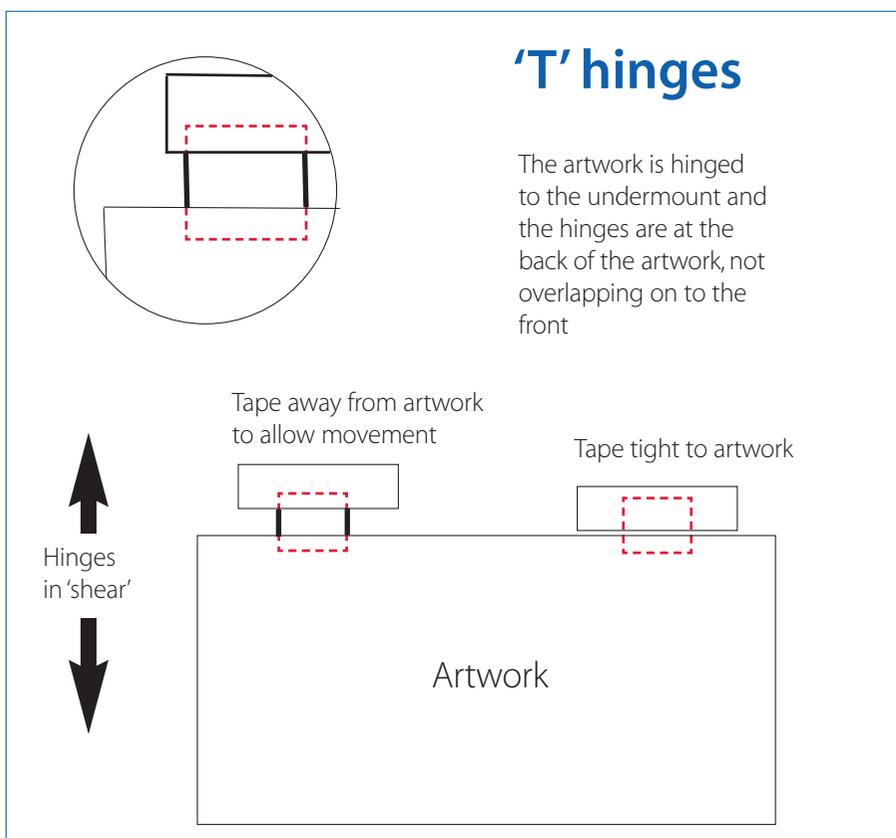
Artwork must never be taped along the top edge, across all four corners or taped on all four sides. These methods do not allow the paper to expand and contract according to changes in humidity and temperature, which puts a strain on the artwork which can cause tearing, cockling and buckling.

Paper is hygroscopic, which means it absorbs moisture from the atmosphere and consequently it reacts to changes in relative humidity. If artwork is hinged in a way that restricts expansion and contraction, then the paper will cockle (wrinkle or pucker). If the artwork has been taped around all four edges it could buckle (bend); a subtle difference, but caused by the same environmental conditions.

In many cases these problems are irreversible. When framing artwork that will not lie flat, be sure to use a double or triple windowmount or other spacers so that there is a safe distance between the glazing and the artwork. (Watercolours that have buckled during the painting process are probably painted on paper that was not stretched prior to painting.)

## Tapes

There are various methods of attaching artwork to the undermount, the majority of which involve the use of adhesives in the form of either pressure-sensitive or gummed tape. Guidelines for the use of both tapes and adhesives can be found in the Fine Art Trade Guild's 'Tapes and Adhesives for Mounting and Framing Artwork on Paper' document, which can be



downloaded from the Guild's website by its members. This is a particularly important and useful document not only for framers, but for all those involved in the hinging of artwork.

The document classifies the types of tapes, papers, tissues and adhesives for mounting and framing artwork and links these classifications to the Guild's Five Levels of Framing. It also highlights six key points that framers should keep in mind when hinging artwork (see box).

As far as tapes for hinging are concerned, at Museum Level a variety of Japanese papers and starch pastes along with cotton or linen gummed tapes must be used. At Conservation Level, hinges, corners or strips made from white conservation paper gummed tape are acceptable. One should note that materials can be used top-level down, but not lowest-level up. Pressure-

sensitive tape can be used at Commended Level or below, though certain types of tape, such as masking tape, cellophane tape and parcel tape, are not suitable for use in professional framing at any level.

### Hinging

There are a variety of methods of hinging artwork to a support and those described in this article can be used at any of the Five Levels of Framing, providing the tape is of a suitably high specification. When considering hinging, reversibility is key and the framer must be confident that the artwork is properly supported.

The tape or paper used should be weaker than the artwork, so that the hinge would tear before the artwork. The application of tape or moisture to the artwork may create local stress, possibly causing problems should there be changes in humidity. This is why you should apply the minimum amount of tape to the back of the artwork; a 5mm overlap is normally considered sufficient, but this depends upon the size and weight of the image.

The quantity and location of hinges depends upon the weight of the artwork and whilst there is no rule of thumb, one cannot go far wrong by multiplying the required number of hinges by two and equally spacing them along the top edge of the artwork. Hinges should not be placed at corners, as sideways stress may cause cockling.

Finally, the strength of a hinge depends on whether it is in 'shear' or 'peel'; those in shear are considerably stronger than in peel. A pendant hinge is in shear and will tear under stress, while a folded hinge is in peel which means that the adhesive will become unattached if the hinge is under stress.

In simple terms, artwork can be 'clip mounted', ie hinged to an undermount so the edges are hidden by a windowmount, or 'float mounted', so that the whole item can be seen in the aperture. There are three types of hinge commonly used by framers: the 'T' or pendant hinge which is used when clip mounting, the 'V' hinge and the 'Z' or 'S' hinge, which is used for float mounting

### The 'T' hinge

The 'T' hinge is the most common option. It is used on the majority of clip mounts, and can support artwork of



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irregular shape, as well as circles and ovals.

The hinge, which is applied to the top of the artwork, comprises two strips of tape. The first (vertical) strip of tape is attached to the back of the artwork, normally overlapping onto it by around 5mm. However, the extent of the overlap depends upon the size and weight of the artwork; miniatures may require an overlap of less than 5mm, while large pictures may require an overlap of up to 10mm.

The second (horizontal) cross strip is attached as close to the artwork as is practical, but is not attached to it. This second strip reinforces the first.

A small gap between the artwork and the cross strip should be allowed on second and subsequent hinges, to allow the work to expand and contract freely, reducing the possibility of cockling should there be a change in relative humidity.

When hinging irregular shapes, the cross strips should be aligned parallel to the horizontal axis as close to the artwork as practical. As both parts of the 'T' hinge are in shear, this should create a strong hinge.

### 'V' and 'Z' hinges

As the names suggest, both 'V' and 'Z' hinges comprise of a strip of tape or paper folded into a 'V' or 'Z' shape. These hinges are normally used when float mounting but are considered weak because they are in peel rather than shear.

Furthermore, if the artwork is on lightweight paper, the double thickness of the folded hinge may result in an indent appearing on the artwork, which →

### An extract from *Tapes and Adhesives for Mounting and Framing Artwork on Paper*, a document published by the Fine Art Trade Guild

Masking tapes, cellophane tapes and parcel tapes are not suitable for use in the professional framing workshop, particularly not for mounting artwork.

It is recommended that framers upgrade to a better quality tape or adhesive whenever practical.

Hinges should be affixed to the back of the artwork. Generally, only attach about 5mm onto the artwork. No part of the hinges should overlap onto the front of the artwork.

Too much hinge attached to the artwork will take longer to reverse and increases the likelihood of future damage to the artwork.

The hinge paper should be weaker than the artwork paper so that, in an accident, the hinge paper would tear first.

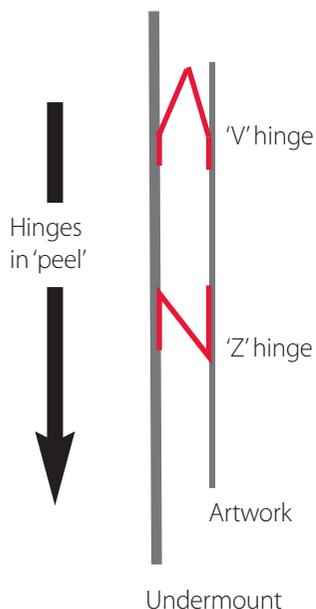
At Conservation Level any self-adhesive tape used in the framing package must be at least 12mm from the artwork to prevent the possibility of damage from adhesive creep.

[www.fineart.co.uk](http://www.fineart.co.uk)

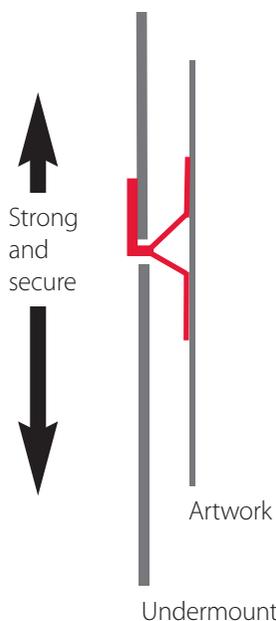
## FRAMING



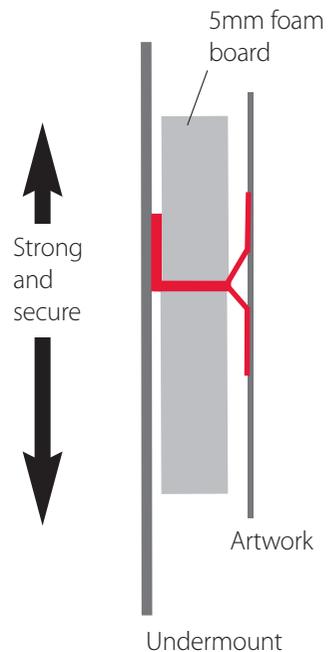
## 'V' and 'Z' hinges



## The 'pass through' hinge



## Hinging a shadow float mount



is even more pronounced if a 'Z' rather than a 'V' hinge is used.

'V' and 'Z' hinges are occasionally used in combination with a 'pass through' hinge to prevent float-mounted items leaning forward towards the glazing.

**'Pass through' hinges**

The 'pass through' hinge provides a strong support and is an excellent method of float mounting. Lengths of tape or paper are attached to the back of the artwork and are then passed through the required number of slits cut into the supporting board. Once the hinge has passed through the board, it is adjusted and secured with a cross piece over each of the tabs on the back of the support board.

This hinge can be modified to provide extra strength. This is achieved by taking a length of tape or paper, folding it into two and then folding the loose ends open and attaching them to the rear of the artwork. Then pass the folded part of the hinge through the support board and secure it as before.

'Pass through' hinges can be used when 'shadow' float mounting artwork. This means that the artwork is distanced from the undermount with a spacer, such as a piece of foam board, so that the artwork appears to float slightly



**'Pass through' hinges can be used when shadow float mounting artwork too. The artwork is distanced from the undermount with a spacer, through which the tape passes**



above the undermount. In this case, the slits would be cut into the foam board, rather than a thinner undermount or support board.

**Mounting without adhesive**

There are various ways of mounting artwork that do not require adhesive, though analysis of these would be the subject of another article. These methods include the use of corner pockets, mounting strips and encapsulation. The materials most commonly used to support the artwork are Japanese papers or inert transparent

polyester film such as Mylar or Melinex.

The main point to remember when choosing a method of mounting is that the framer's role is to protect and preserve artwork, so your chosen method should interfere with the original condition of the work as little as possible. Unless the customer specifically states otherwise, your chosen materials and techniques must be fully reversible. ●

*Mal Reynolds GCF Adv runs Harlequin Frames near Lincoln. He is an expert in textile framing, holds training sessions and is part of the Valiani support group*

**Training at Spring Fair International**

Mal will be presenting seminars at Spring Fair International, 5 to 9 February. These sessions are free of charge and take place in the centre of Hall 4, the art and framing hall. Mal will be explaining how to frame antique samplers at 1pm on Sunday 5th and 3pm on Wednesday 8th. He will be holding sessions on conservation hinging at 1pm on Tuesday 7th and 10am on Thursday 9th.  
www.fineart.co.uk or www.springfair.com