## Questions For 1997

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Thanksgiving dinner dishes, our thoughts quickly turn to the Christmas holidays: Later work hours, diversified last minute framing and more opportunity for rushing...which could cause greater carelessness, resulting in more mistakes. The vicious cycle continues.

The end of the year brings me once again to my "Most Asked Questions" column. It hardly seems possible that it's been a full year since we last discussed some of these prob-

lems. Of course, that's because it really hasn't been. After all,

asked questions, and in some cases I've addressed them with entire articles throughout the year. So here goes:

WHY DO AIR BUBBLES
OCCUR IN THE CENTER OF
LARGER MOUNTINGS, REGARDLESS

## OF THE CHOSEN MOUNTING METHOD (WET, SPRAY OR DRY)?

Back to the basics for this answer. Without detailed explanation, air has been trapped within the center of the mounting. Wrinkles and bubbles are often the result of damp materials. If wet mounting, both the substrate and poster need to be dampened to encour-

age the paper fibers to expand with moisture absorption of the wet glue. If only one or the other are applied with adhesive, bowing can occur in the dried mounting. Uneven moisture in the substrate, the result of damp materials prior to mounting, do not allow for control of the moisture application during the mounting process. The result can appear to be trapped air or uneven expansion of saturated paper fibers.

With spray adhesives, any moisture in the substrate prevents the adhesive from absorbing adequately into the surface to hold effectively onto the poster. Photos are another issue when spray mounting. Any nonporous surface, such as a resin-coated photograph, resists the absorption required for a quality bond.

Using the appropriate sprays, those designated specifically for nonporous photos, is the first step to success. If then the spray is properly applied in two directions, allowed the suggested open time for solvent evaporation, and weighted during drying, bubbles may be avoided.

Like the above spray adhesive, dry mounting air bubbles are mostly the result of moisture content in the poster and/or substrate. The simple solution is to pre-dry all projects when using a mechanical press. Any moisture present during dry mounting can become a

condensed liquid or steam (at 215°F), which expands, creating a bubble.

In a vacuum system the bubbles can be the result of the outer edges of a dry mounting adhesive being permanently mounted to the outer edges of the substrate prior to the vacuum having been pulled within the press. Once mounted, no amount of pressure or hole punching in the back of the substrate or through the print will ever allow for the outer edges of the print to shift out and flatten down.

Though much of the time this bubbling problem occurs with non-porous paper and photos, it is a problem regardless of wet, spray or dry mounting method. In order to best avoid center bubbles in large mountings, pay closer attention to moisture content in the materials prior to mounting, and then appropriate pressure during drying.

# How do I mount Cibachromes (Ilfochrome Classics) to keep them smooth and glossy?

This is an ongoing question. The best answer is: don't mount them at all!

The best way to mount them would be by static mounting ("Static Mounting", *PFM* February 1997) the polyester photo to an acrylic sheet, with or without flange hinging across the top. The static inherent in the image itself may be used in a positive way to help hold the image center from buckling forward

by keeping it held back to the acrylic substrate.

Other variations include edge strips and Mylar corners, but large images will still have a puckering problem, which the static would eliminate. Applying pressure-sensitive films onto a smooth substrate such as glass, acrylic, Gatorfoam, or MightyCore, will affix the image more permanently, but may result in some degree of orange peel.

# CAN RAW CANVAS BE USED WITH PURE FILM DRY MOUNT ADHESIVE TO MOUNT CANVAS TRANSFERS?

Yes and no. Yes, raw canvas may definitely be selected for transferring, but the adhesive approach will vary. There are two problems with film adhesive applications onto raw canvas. First, the loose stripped image decal, loose film adhesive, and loose raw canvas allow for too many opportunities for wrinkles to occur during dry mounting, particularly in a vacuum press.

Second, in theory the film adhesive concept should work fine with canvas, but the adhesive works more as a self-leveler rather than melting into the highs and lows of the uneven canvas texture. As it melts into the texture it fills the lows and smooths the surface eliminating a lot of the desired texture. On heavily textured and course canvas this may still be visually adequate, but in fine linen the texture will never be defined well enough.

There are wet glues which may

be brushed onto raw canvas or linen, allowed to dry, then will reactivate when placed into the heat of a dry mounting press. The best way to achieve ultimate texture of the selected canvas is to use one of the dried "heat activated" wet glues.

# WHY DO THE NAMES ON CERTIFICATES TRANSFER TO RELEASE PAPER? AND HOW CAN I TELL WHEN IT WILL HAPPEN?

There is good news and bad news here. The good news is the knowledge that heat sensitivity is an issue we must constantly be concerned with, the bad news is its tough to tell when things are heat sensitive.

Computer generated certificates are the culprit for names that transfer to your release papers. Though I continue to be involved in research on heat and laminate sensitivities of laser and inkjet printers, it appears that some printer inks are set by heat. Reapplication of heat at similar temperatures appears to indeed reactivate them so they are able to transfer even to nonstick silicone release materials...that is until the following project allows it to be transferred to its surface.

At this point I can offer no assistance in when this will happen. Many certificates are offset printed with the bulk of the information, with the names and dates printed from a computer. The advise is to always treat them as heat sensitive.

I am a firm believer in not aggressively mounting any certificate

### mastering mounting

to a stiff substrate. Therefore I suggest, hinging, corners, edge strips etc. But I do realize many people request them mounted smooth and flat! So if you must mount, think pressure-sensitive films. P-S boards, wet glues, and sprays are all fine if you understand the procedures and control the orange peel in the substrate selection.

#### WHAT PRESS SHOULD I BUY?

This is a question I can't answer for you. Its not that I don't want the responsibility, its more I will never understand all the requirements nor the uses for it.

Mechanical presses differ drastically from hot vacuum presses, that is obvious (see "Mechanical VS Vacuum", *PFM* September 1993). There is no better or worse. They can all do the same basic things.

The largest difference is that mechanical presses require manual monitoring of the pressure and moisture elements for successful mounting, while vacuum presses automatically adjust for pressure and draw out most of the moisture.

Mechanical presses are capable of mounting items much longer and larger than the platen size while vacuums are restricted to the inner platen dimensions.

As far as the differences between vacuum systems, there are glass top vs. opaque top; 1" drop vs. 3" drop; rubber vs. rubber impregnated fabric diaphragms; and variables vacuum draw time, pump maintenance, and cleaning...but basically all the same.

Select the press based on ease of size, ease of operation, maintenance, service after the sale, and the work slated for it in five years. Heat is all that is needed for dry mounting, laminating, and/or canvas transferring. The selected press does not matter.

# WHY DO I GET SCUFF MARKS ON HIGH GLOSS PHOTOS WHEN DRY MOUNTING?

Interesting this is one of the most asked questions of all time. Though it can occur on all finishes it is most obvious on high gloss. I just addressed this issue in the *PFM* November`97 column, "Photos: Three Undesirables."

I was told repeatedly by Kodak and Ilford the mounting temperatures were simply too hot in the presses and the marks were emulsion damage. My theory was silicone from the release materials, they disagreed. Upon testing with different release materials and cover sheets (see article), the results lean heavily toward the damage being a result of the silicone.

The solution is to use a thin sheet of acrylic called "overlay foil" directly on top of the photo when heat mounting. The polyester release paper is better than the

paper but can still leave a residue.

## DO I ALWAYS NEED TO USE PERFORATED FILMS WHEN LAMINATING?

The concept behind a perforated film is to allow the potentially trapped air to be squished from between nonporous layers prior to bonding. If the item being mounted and laminated is nonporous as with an RC photograph, a perforated film is required.

Though paper is generally considered porous (or breathable) low end posters on clay-coated paper stock does not allow air to pass through it. Upper end prints with heavy inks or lacquered glazing are also not truly porous. With either of these type of paper prints it is safer to perforate the laminate before bonding. These materials are permanent rather than removable and once air has been trapped between two nonbreathable surfaces the project has suffocated.

# WHEN USING LAMINATES IN A CREATIVE APPLICATION (LEATHER-LOOK, CONTEMPO PANELS OR FAUX GLASS ETCHING) WHY DOES THE MOUNTED LAMINATE NEED TO BE SPACED AWAY FROM THE GLAZING WHEN ITS ALREADY BEEN MOUNTED?

If the vinyl laminate was mounted onto the mat board (leather-look or contempo) and pressed directly against the inside of the glass when framing it could trap condensation or stick to the glass. A spacer of



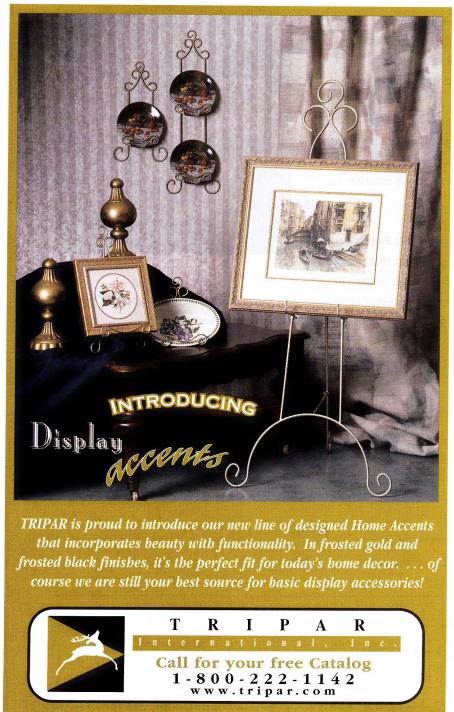
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some kind will keep an air space between the nonporous laminate and glass.

If, however, the laminate was mounted to the back of the glass as faux glass etching no spacer is needed. The nonporous laminate is permanently bonded to the glass disallowing for moisture to be trapped between them. As long as the mat board or poster print is porous and air can move through it as needed.

#### CLOSURE FOR THE YEAR

Its tough to limit the number of issues in this yearly recap.

Interestingly many of the same questions pop up year after year. I think this is partially due to the new framers in the industry every year, but also its we often don't pay attention the answers until the problem crosses our threshold directly.

These questions and other related mounting issues are also covered in depth in my new book released this past August, *The Mounting and Laminating Handbook*, available through PFM PubCo. I'm always here to help you help yourselves.

Thanks for another great year of reading the column and here's to 1998! ■

Chris A. Paschke, CPF, GCF, owns Designs Ink, Oxford, Connecticut, featuring commercial and retail custom framing, product consultation, design and education. Specializing in mounting, matting and design creativity she works with numerous industry leaders, and has just released her first book, The Mounting and Laminating Handbook.