Masking Solution
FOR New Traffic Signs

3M™ Protective Overlay Film (POF) Series 1160

Customer Problem

At some time most local authorities will need to mask out all or part of a traffic sign.

A sign may need to be installed prior to road users needing to see it or route changes are planned and road users must be safely informed. Or perhaps a sign's message will be changing in a few months time and the authority needs a rapid method to change information overnight when works are completed and new details apply.

Current Methods

A variety of methods have traditionally been used to cover up all or part of a sign. These range from bolting on a cover plate, applying spray-on masks, to fixing a plastic bag over the entire sign.

None of these methods are very satisfactory. The bolt on option can damage the signs; bags are a potential safety risk as well as being unsightly. Spray-on masks do not completely obscure the area to be blanked out and may damage the reflective sheeting when removed.

The 3M Solution

To mask new signs there's a solution that can be provided during manufacture. The sign is completely covered with 3M™ Protective Overlay Film (POF) Series 1160 to provide a low energy surface to which temporary patches can be placed to obscure all or part of the sign.

For example, a Primary Route Directional Roundabout Sign made from 3M Diamond Grade Reflective Sheeting would be completely covered with Series 1160 POF at the signmakers. To mask one of the exits, a patch made from green Diamond Grade sheeting would be cut to the appropriate size and shape, and then applied over the section that needs to be hidden.

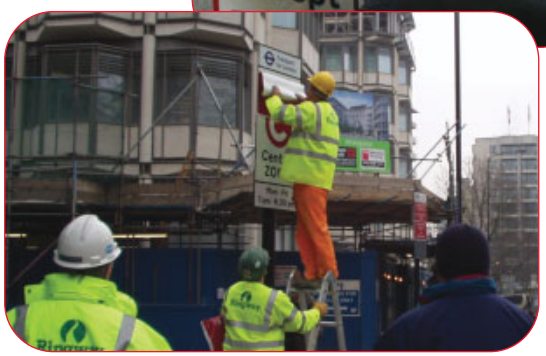
When the masking is no longer needed, the patch of Diamond Grade can be easily removed by hand with no damage to the sheeting underneath.

Signs covered with Series 1160 POF can have patches added and removed throughout their warranted life.

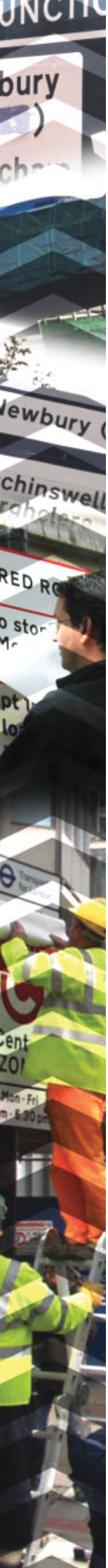
The Series 1160 POF can be left in place to offer protection against graffiti and stickers. It is designed to enable the easy removal of the most common types of defacement including spray paints, lipstick, permanent pen and promotional stickers.

Examples of applications

- Sign installed prior to road users needing to see it
- Hiding roundabout exits during maintenance work or road closure
- Sign information needs to be changed rapidly
- Permanent or temporary route changes



Series 1160 POF was used by Transport for London to temporarily mask Congestion Charging Signs before they come into force.



Technical Hints AND 3M Guarantees

Application of Series 1160 POF onto a sign

Applying large areas of Protective Overlay Film Series 1160 to signs is best achieved using a squeeze roll laminator. Smaller areas can be hand laminated. Only apply Series 1160 POF to clean, dry signs when the air and surface temperatures are above 16°C (60°F). Series 1160 POF is supplied with a paper premask tape lightly adhered to the top surface to aid in application.

Trim edges prior to removing the premask tape. After the premask tape is removed, re-roll the sign to ensure good adhesion.

Suitability

Protective Overlay Film Series 1160 can be used on signs which use 3M™ ElectroCut™ Film, Scotchcal™ Film or are screenprinted to create the legend/symbol/borders. Signs made using reflective cut copy may be overlaminated with Series 1160 POF but the POF must then be cut around the raised edge of the legend and reapplied. This prevents a halo effect around each letter or symbol which may tear and become cosmetically unwanted.

Application of Series 1160 POF to retroreflective signs may reduce their reflectivity by up to 5%. Typically, 3M reflective sheetings exceed the warranted minimum R_A Values comfortably so this reduction does not affect its performance.

Application of Temporary Patch

Small or large areas of a sign overlaminated with Series 1160 POF can be patched with Diamond Grade, High Intensity, Engineer Grade Sheeting or Scotchcal. The patches can be applied at the time of sign production or later after the sign has been installed. The area of the sign to be patched must be clean and dry and the air and surface temperature above 10°C. Position the patches so the edge is not in the same place as the edge of the POF. This prevents someone inadvertently pulling the POF off with the patch.

Removal

Patches are easily removed by simply lifting at one corner and peeling back the reflective sheeting patch. All films become less flexible in cold weather. Warming the patch will make removal easier in cold weather.

Effective Life Performance

Protective Overlay Film Series 1160 when used according to the recommendation of 3M will provide the same effective performance life as the sheeting on which it is applied.

3M

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