

## Technical Bulletin 6.1

### Guidelines on handling, converting and applying Macal Truck Tarp film

The present Technical Bulletin provides detailed information on how to prepare, convert and apply Macal Truck Tarp. For specific information on a product's properties please consult the corresponding technical datasheet. Macal Truck Tarp are cast vinyl film coated with specific adhesive designed to give a permanent adhesion on highly plasticized PVC banners or tarpaulins. See Annex 1 for the detailed list of colors and laminate available.

Macal Truck Tarp is designed for computer cutting, weeding and the white colored film can be printed digital print platforms. The series is available in six popular opaque matt colours. A matt laminating film Macal Truck Tarp Laminate is available to protect the printed media.

In order to ensure a successful application, please read carefully the instructions below.

#### REQUIRED TOOLS

To ensure proper application of the film, the following tools are recommended:

- ➔ Mactac Fluids to clean the surfaces prior to application when appropriate,
- ➔ Squeegee,
- ➔ Application fluid: Addition of 0,5 % of neutral detergent to water will give you the right application fluid or suitable ready to use application fluids,
- ➔ Lint-free cloth for cleaning.

#### SURFACE PREPARATION

Proper cleaning and preparation of the substrate prior to application is critical for successful graphics. Even if they appear clean, all surfaces must be cleaned prior to application following the instructions below:

- ➔ Macal Truck Tarp is designed to adhere to new tarpaulin. It can be applied to a wide variety of flexible, PVC coated substrates. As some PVC coated substrates have been topcoated or treated otherwise, applicators should convince themselves that good adhesion can be obtained before actual use.
- ➔ Used tarpaulin may also be used with Macal Truck Tarp, it is the customer's responsibility to test the adherence and suitability prior to full application. The application of Macal Truck Tarp on used tarpaulin is to the sole responsibility of the customer. The application of Macal Truck Tarp onto existing decals or printed tarpaulin is not recommended.
- ➔ Dust or any other residues should be cleaned using a brush (supported by a vacuum cleaner), a moisturized towel and a lint-free cloth.
- ➔ Use Mactac Cleaner to remove grease, glue or any other residues from a previous application, or use detergent when needed.
- ➔ Dry the surface using a lint-free cloth or a clean paper towel that does not leave any small pieces behind before the Mactac Cleaner has evaporated..

Prior to application, please ensure that the substrate is moisture free and that all surfaces have been thoroughly cleaned and completely dried. A rigid background is recommended to allow applying sufficient pressure on the flexible tarpaulin substrate.

## CONVERSION

This product serie can be converted using computer sign cutting equipment, digital print platforms (White only). A lamination is recommended to protect the print.

### Printing

Macal Truck Tarp White is suitable for printing using solvent, eco-solvent, latex and UV-curable flexible inks. Always perform the whole printing job at the same time, using the same product batch number to avoid colour differences and any other deviations. Media profiles can be downloaded from [www.mactacgraphics.eu](http://www.mactacgraphics.eu). In case of solvent printing, films need to be fully dried before overlamination. In general a drying time of 24 hours (full solvent) or 48 hours (eco-/mild solvent) will be sufficient. In case of a high ink load, materials may need increased drying time in order to be sufficiently dry. When drying, material should not be tightly wound on a core, as the solvents are unable to evaporate. The materials should be left drying loosely wound on a core, or stacked in racks as sheets. Printing results are expected to be satisfactory from larger viewing distance.

Printed Macal Truck Tarp films are not recommended to be further processed on flatbed plotter, roll to roll plotters (drumroll plotter) are suitable.

### Lamination

It is very important to monitor temperature and tension during the laminating process. Using heat is not advised for Macal Truck Tarp and its laminating film as this may easily cause the film to be stretched. Improper tension can also cause the film to elongate, causing defects after the combination has been applied to a substrate.

### Cutting and weeding

Clean, quick, and trouble-free cutting is possible using flatbed or drum plotters. Adjustment of the cutting depth is important: a too deep cut can result in paper split, causing a tearing and lifting when weeding the signcut or matrix. Adjust pressure and speed allowing only cutting the vinyl.

Small letters (< 2cm) are not recommended.

Overposting of max. 5mm or edge to edge applications are both suitable.

More information can be retrieved in the Technical bulletin 5.0 Marking films application guide.

### Application Tape

The following application tapes are recommended:

- ➔ Application papers: MACtransfer 100 High grade and MACtransfer 215

## APPLICATION METHOD

### Preparation

Rolls and Tarpaulins should be acclimatized in the working area.

The best working conditions in a plotting room are 18-23 °C and 40-55 % R.H.

The minimum application temperature is 10°C.

Use the tools described earlier in this Technical Bulletin 5.1 and ensure the cleanliness of the substrate. Macal Truck Tarp can also be applied on used/older tarpaulin material, the condition of the tarpaulin has to be tested on a small area prior to a full application. The application is at the sole risk of the customer.

A wet method or dry method application techniques may be used. The method chosen should suit the size of the decorative feature to be applied and the complexity of the surface to be decorated.

Please refer to the Technical Bulletin 5.0 for further detailed information.

The specific adhesive used on the Macal Truck Tarp has a quick bond build up. The wet method allows to reposition the graphic within the first few minutes of the application. 2 hours after the application the tarpaulin reaches a sufficient adhesion, now the tarpaulin + graphic can be fixed on the truck trailer.

If the tarpaulin is not assembled back to the truck trailer within the same day, the material can be stored in a flat or wound way. It is important that the graphic is facing the upper side when stored flat and the outside when stored in a rolled way.

**Note:** It is the user's responsibility to determine a film's suitability, prior to full production and application of graphics.

**To ensure application suitability and substrate compatibility, always test the proposed construction under actual application and end-use conditions before going into full production.**

#### REMOVAL

Macal Truck Tarp is a permanent film.  
No warranty on removability will be given.

#### CLEANING AND MAINTENANCE

A regular cleaning is recommended in order to maintain a high quality image of applied Macal Truck Tarp. Wait a minimum 48 hours after application before cleaning. Any vehicle cleaning schedule is dependent on the weather, traffic and road conditions, it is advised to clean once a month with non-aggressive detergents. No solvents nor steam washes should be used. The water temperature should be ideally between 30-40°C. Too high temperature will reduce adhesion and damage the graphic.

When using high-pressure cleaner:

- the distance between the cleaning equipment and the graphic should be higher than 60 cm,
- the pressure should be max. 80 bars, too high a pressure can cause the graphic to delaminate from the substrate.
- the water jet impact angle must be higher than 45°C. Targeting the edge of a graphic with high pressure and with a small angle, results in a high risk of edge lifting.

#### Important:

The above recommendations and cleaning instructions are intended only as a source of information and are given without a guarantee and do not constitute a warranty. Purchasers should independently test cleaning agents and methods, prior to use, to determine their suitability.

## Annex 1 - List of Macal Truck Tarp colors and laminate

<b>Product Name</b>	<b>Width/Length (m)</b>
<b>Macal Truck Tarp 58-00 Medium Red Matt</b>	1.23 x 50
<b>Macal Truck Tarp 08-46 Banana Yellow Matt</b>	1.23 x 50
<b>Macal Truck Tarp 28-00 White Matt</b>	1.23 x 50
<b>Macal Truck Tarp 48-55 Grass Green Matt</b>	1.23 x 50
<b>Macal Truck Tarp 38-12 Ultramarine Blue Matt</b>	1.23 x 50
<b>Macal Truck Tarp 88-00 Black Matt</b>	1.23 x 50
<b>Macal Truck Tarp Laminate</b>	1.23 x 50

*Important notice Information on physical and chemical characteristics and values in this document are based upon tests we believe to be reliable and do not constitute a warranty. They are intended only as a source of information and are given without guarantee and do not constitute a warranty. Purchasers should independently determine, prior to use, the suitability of this material to their specific use.*

*All technical data are subject to change. In case of any ambiguities or differences between the English and foreign versions of this document, the English version shall be prevailing and leading.*

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