

# Application Guidelines for MetaWrap

MetaWrap has been developed for vehicle wraps with recesses and compound convex curves. Vehicle wrapping requires the correct techniques through training to achieve the best results.

## 1. Choose the right MetaWrap for the vehicle.

- MD-X has an air-release feature and is suitable for modest recesses, allowing faster fitting. MD-XB is suitable for deeper recesses – These include single recesses (L shaped) which have a smaller radius, and double channels (U shaped).
- MetaGuard X matched overlamine should always be applied for protection and MetaWrap films are designed to handle correctly when overlaminated.

## 2. Always use the correct ICC Colour Profile.

- MetaWrap films are thin so require lower ink levels than generic print media – Excessive solvents that result from an incorrect profile can reduce adhesion levels by as much as 30% – this is critical in areas most under stress where full adhesion is needed.
- Profiles are available for download from [www.metamark.co.uk/profiles](http://www.metamark.co.uk/profiles)

## 3. Always ensure the prints are fully out-gassed.

- Allow a minimum of 48 hours for the solvents to out-gas, before overlaminating and before application to the vehicle. Retained solvents, drying conditions and colour saturation will significantly reduce adhesion – Solid dark colours can require in excess of 48 hours.
- Store prints to allow air to circulate fully through the media. Leaving prints stacked, tightly rolled, or standing on end does not allow proper out gassing.
- Apply a trial piece to check the print has out-gassed.

## 4. Always ensure the vehicle is cleaned meticulously.

- This is particularly important in the deepest part of recesses, any area where the media is under stress, and around edges. Vehicle Wrapping is only possible in a clean dry workshop environment, to allow the vehicle to be meticulously clean, at the right temperature, and to be completely dry.
- Clean initially with warm soapy water, then with IPA or Surface Cleaner and lint free cloth, while applying pressure.
- Repeat the clean around recesses and edges, and if the vehicle has been left for a while before fitting.
- Additional cleaning will be needed if the vehicle has been prepared with wax products, or if there is overspray of silicon based products used on trim.
- Pre Delivery Inspection (PDI) waxes that can require additional cleaning

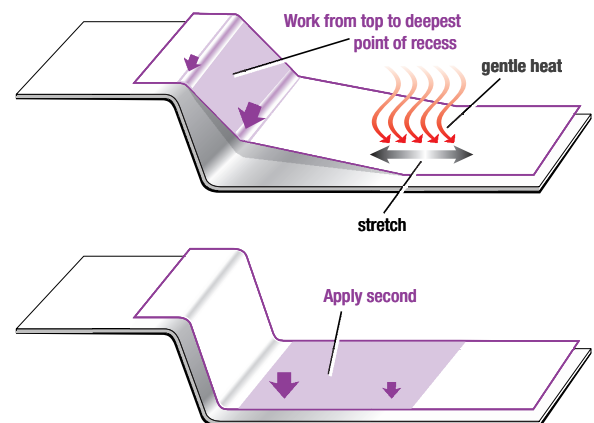
## 5. Always ensure the correct fitting temperature.

- The vehicles must be at 17-24°C, which can be done by putting a fan heater inside the vehicle. The vinyl should be at a similar temperature. The vehicle must be fully dry, and in a workshop environment.
- Apply the film with a dry method only. Any contaminants or moisture will weaken adhesion.
- Water-based vehicle paints will give lower adhesion.
- Primers may be used but users should determine suitability.

## 6. Technique for application into recesses.

- Recesses require the film to maintain its maximum achievable adhesion in the deepest part of the recess, as it is here it is most under stress. The correct technique works film from surrounding areas under less stress using gentle uniform heat. Apply firm pressure whilst applying and rub down again afterwards.
- Do not over stretch the media. Stretching the media by just 50% will reduce thin the adhesive and reduce adhesion levels by 35%.
- For double channels apply to each side in turn. As with single-channels, warm the area away from the recess to gain stretch. Do not push into the centre of the channel first, as this will cause a failure.

### SINGLE CHANNELS



**MetaWrap**  
**MD-X**

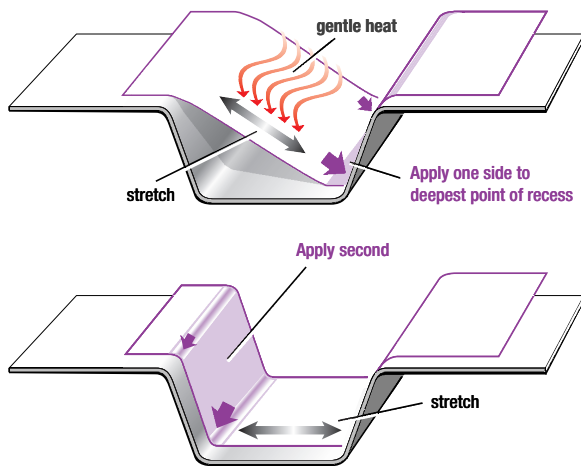
**METAMARK**  
The Materials Company

# Application Guidelines for MetaWrap

## 7. Technique for application over convex curves.

- The correct technique pre-stretches the film on the convex area, working film from flatter areas under less stress whilst applying gentle uniform heat.
- Do not tension the film towards the edge of a convex curve or edge to remove excess, this will cause the film to pucker and lift.

## DOUBLE CHANNELS



## 8. Do not apply a vertical join in a recess.

- This will create a failure point. Use the full width of the media and design the panel with the join on the flat part of the van – design the panel landscape.
- Then apply any joins such that the overlap faces downwards or away from the direction of travel.

## 9. Post-heat the film in recesses and on the edges.

- Post heat (Super-heat) the film immediately after application to 90-95°C using a digital thermometer.
- Post heating is vital to bond the adhesive fully to the vehicle and to recast the film.
- Do not return later to do this. Be sure to complete the area of application fully and do not attempt to return later to the area to finish the work as the adhesive will have started to cure already and the bond strength will be significantly less.
- Over-heating can cause the adhesive to delaminate.

## 10. Removing entrapped air

- Avoid entrapped air. Bubbles may be pricked to release air, but aim to make the incision on the flat part of the panel where the vinyl is under less stress.

Please note: These guidelines offer the main points to a successful application with MetaWrap. They are only a guide and do not guarantee a successful wrap. The success of the application is determined by the skill of the installer.

### Metamark Vehicle Wrapping Course

Vehicle wrapping is growing in popularity and represents an attractive commercial opportunity for those with the skills needed to do the job.

Contact us to find out about our Vehicle Wrapping Courses to gain real hands-on Wrap experience as well as top tips and tricks.

### MetaSure Warranty

MetaWrap MD-X is covered by our MetaSure warranty program. For data sheet and full warranty details please

visit [www.metamark.co.uk/technical](http://www.metamark.co.uk/technical)



### Metamark (UK) Limited

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