

MetaCast® MCX has been developed for full and partial vehicle wraps with recesses and compound convex curves. Successful vehicle wrapping requires the correct techniques learned through training and developed through experience to achieve the best results.

### 1. 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 cleaned, achieve the right surface temperature, and to be completely dry.
- 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 can require additional cleaning to remove completely.
- Clean initially with warm soapy water, MetaMark Adhesive Remover, MetaMark Surface Cleaner then with IPA using Microfibre or lint free cloths.
- Repeat the clean around recesses and edges, and if the vehicle has been left for a while before fitting the printed film.
- See 'Vehicle Preparation Guide' for full cleaning details.

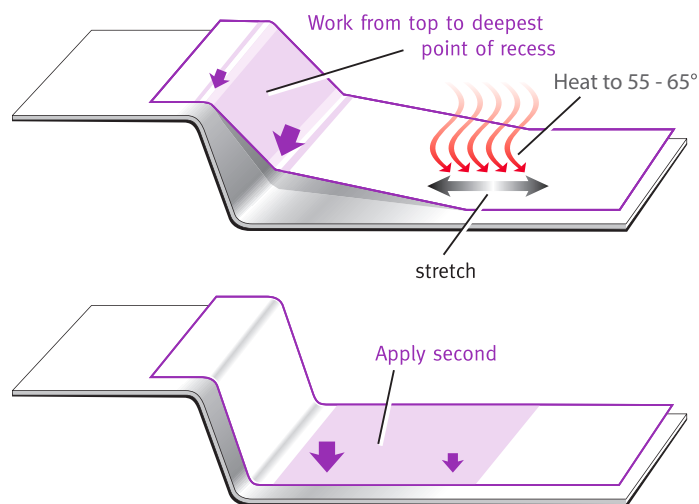
### 2. Always ensure the correct fitting temperature.

- The vehicle must be at 17-24°C, which can be done by putting a fan heater inside the vehicle.(1) 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 achieve lower ultimate adhesion.
- Primers may be used but users should determine suitability.

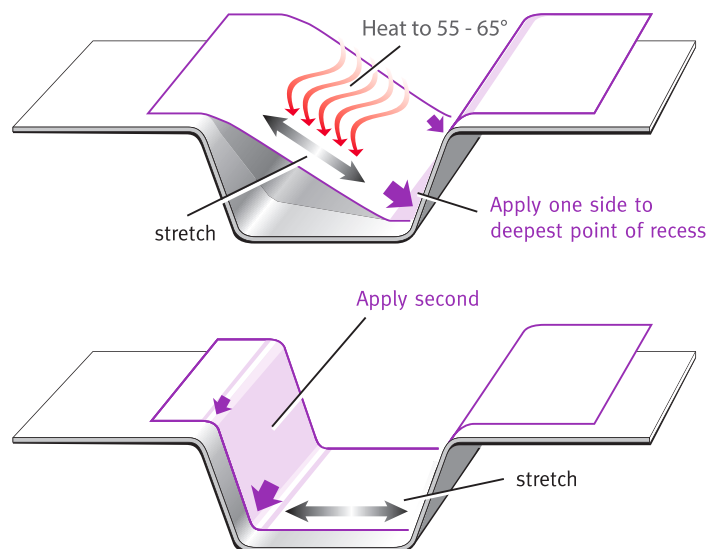
### 3. Technique for application into recesses.

- Recesses require that the film maintain its maximum adhesion in the deepest part of the recess as it is here that it is most under stress. The correct technique works film from surrounding areas under less stress using gentle uniform heat. Use firm pressure during application and rub down again afterwards.
- Do not over-stretch the media. Stretching the media by just 50% will thin the adhesive and can 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 may lead to eventual failure.

#### SINGLE CHANNELS



#### DOUBLE CHANNELS



#### 4. 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 as this could cause the film to pucker and eventually lift.

#### 5. 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 joints on the flat part of the van – design the panel in landscape to create more favourable application opportunities.
- Apply any joints such that the overlap faces downwards or away from the direction of vehicle travel.

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

- Post heat (Super-heat) the film immediately after application to 95°C using a digital non-contact thermometer to measure the surface temperature.
- Post heating is vital to bond the adhesive fully to the vehicle and to recast the film.
- Do not return later to post-heat as the adhesive will have started to cure already and the bond strength will be significantly reduced.
- Over-heating can cause the adhesive to delaminate from the face film.

#### 7. 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.

#### 8. Applying Metallic & Matt finishes.

- Metallic and Matt film finishes should be applied in the same direction. When applied in different directions the light reflection can make the drops appear different shades.

Please note: These guidelines suggest the main points to be observed for producing a successful application with MetaCast® MCX. The success of the application is ultimately determined by the skill of the installer – results therefore may vary and cannot be guaranteed.

(1) Use extreme caution. Avoid directed hot air contacting trim, plastics and upholstered surfaces, and trailing mains leads. Never leave unattended. Ensure adequate space around heater.

#### 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 Course to gain real hands-on Wrap experience as well as top tips and tricks.

#### MetaSure Warranty

MetaCast® MCX is covered by our MetaSure warranty programme. For data sheet and full warranty details please visit [www.metamark.co.uk/technical](http://www.metamark.co.uk/technical)



For more information contact your local Ball & Doggett representative on **1300 713 567** or [sdd@ballanddoggett.com.au](mailto:sdd@ballanddoggett.com.au)  
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