

Intended purpose



Mipa application guidelines for multi-layer coatings with pearl effect aim to provide assistance to painters in achieving optimal consistency in colour and effect. This is the instruction in how to apply pearlescent white paints.

Reason: Opaque metallic and effect colours, when applied appropriately, do not cause colour deviations due to different coat thicknesses, but this is a problem when applying transparent multi-layer effect colours.

The transparent 2nd layer, also called "Coating 2", is generally susceptible for coat thickness related colour and effect deviations. The "thicker" this transparent layer is applied the more intensive the colour or the pearl effect turns out to be too strong.

Therefore, the painting is much more difficult and requires a structured approach. See the following recommended painting process:

Step 1: Colour matching

Colour matching is made directly on the damaged coating of vehicle by means of Mipa MCS Colorbox or the colour measure device SSP. Based on this colour determination, the corresponding Mipa WBC formulation for Coating 1 and Coating 2 are mixed according to the MipaMix formulation.

Step 2: Refinish

Please note that due to the difficult colour matching painting edge to edge is not possible. Therefore, always blend into adjacent body parts.

Substrate preparation

After appropriate pre-treatment, prime the area to repair or new parts with a white or light grey Mipa 2K filler (e.g. Mipa 4+1 Acrylfiller HS white or light grey, Mipa 2K-Multifiller light grey, Mipa 2K-HS Fillprimer light grey, etc.). In case of sanding fillers, it is recommended to start dry sanding with grit P 600 and working up to finer abrasives using an orbital sander + fine wet sanding with grit P 1000. Corners and edges should be sanded only manually to avoid sand through areas.

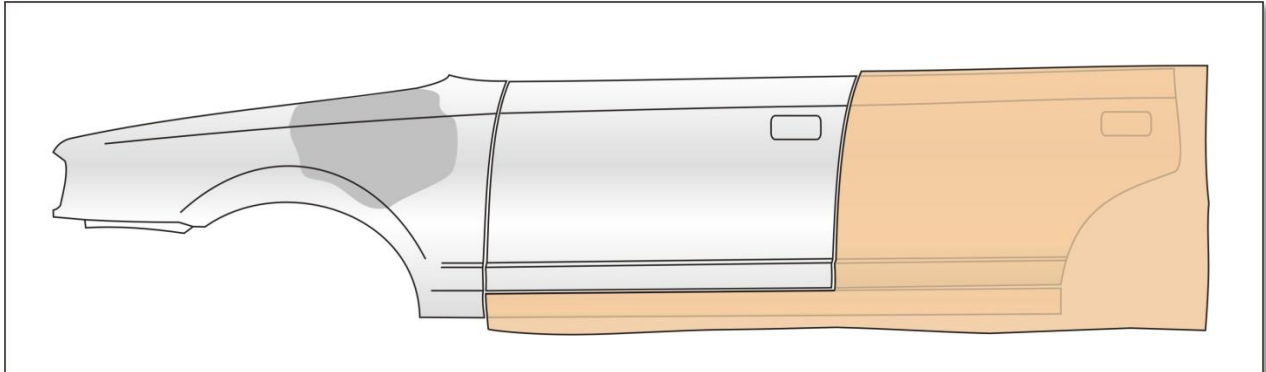
Prepare the blending zone: Sand uniformly to a matt finish all body parts which have to be blended using 1000 grit dry or 1500 grit wet. Please sand carefully to avoid sand-through areas and/or sanding marks. Therefore, we recommend using alternatively Mipa Vorreiniger 'Mat & Clean' which is perfectly suitable to achieve a fine pre-sanding without sanding marks.

The surfaces to be coated need to be degreased and cleaned very thoroughly as already tiniest dust particles or other superficial disturbances may cause visible imperfections in the surface.

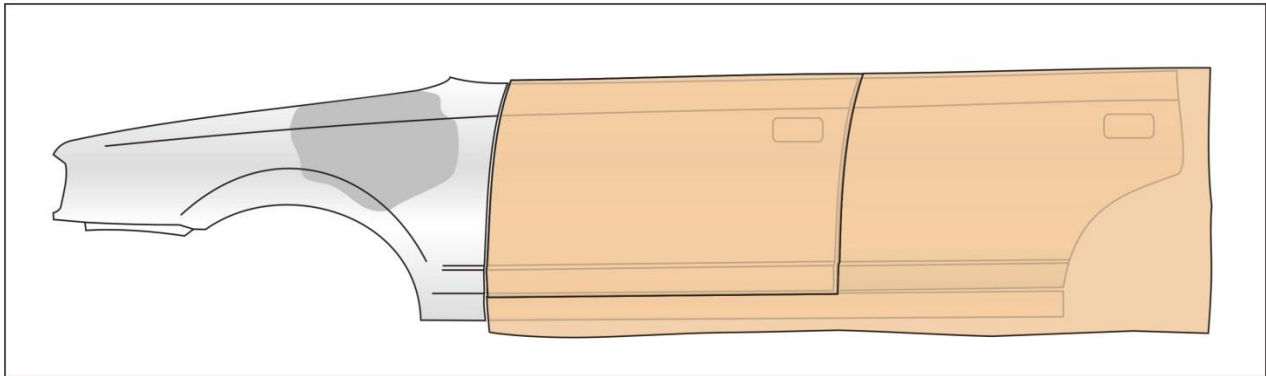
Initial situation: after filling, the wing shall be painted in exactly the same colour as the door

wing panel filled and sanded,
ready to be painted

faultless door, sanded slightly with very
fine grit, blending zone



Mask the blending zone: To avoid excessive overspray deposits on the blending zone, it is masked.

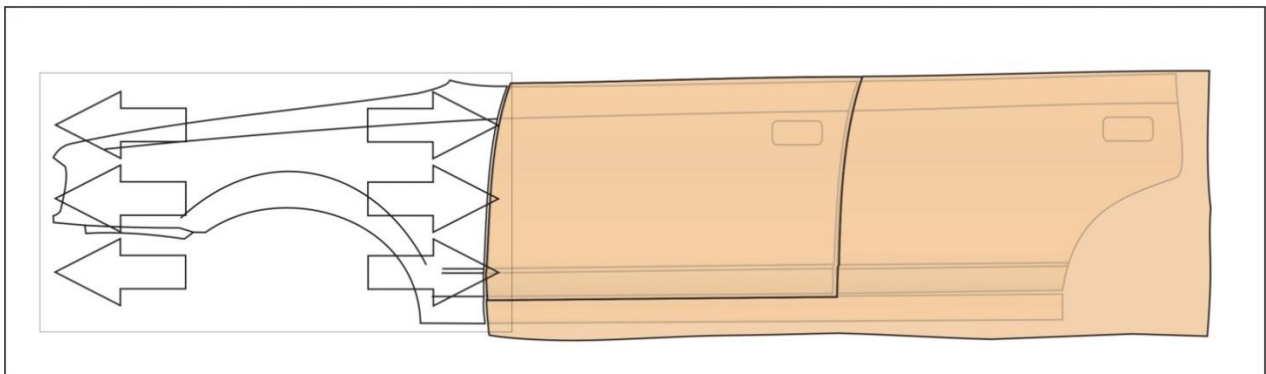


Application of Coating 1:

Apply first a covering layer of Coating 1 on the wing. It is important to take care that filled surfaces and imperfections are recoated absolutely covering. The application is carried out according to the technical data sheet "Mipa WBC 2-Schicht-Basislack".

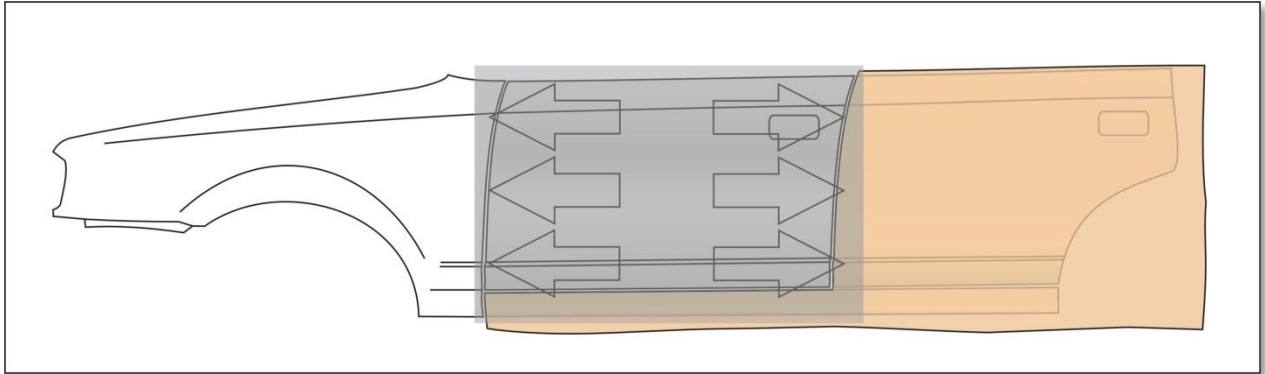
Important: Since it is a multilayer coating and in order to improve the through drying, Coating 1 needs to be crosslinked with the hardener Mipa WBC-Härter as follows (Mix Coating 1 immediately prior to use!):

"Coating 1" = Mipa WBC basecoat + 5 % by weight or by volume Mipa WBC hardener (stir first the hardener thoroughly in the WBC paint), then thin by adding 10 - 20 % of Mipa WBC-Verdünnung or Mipa WBS Beschleuniger.



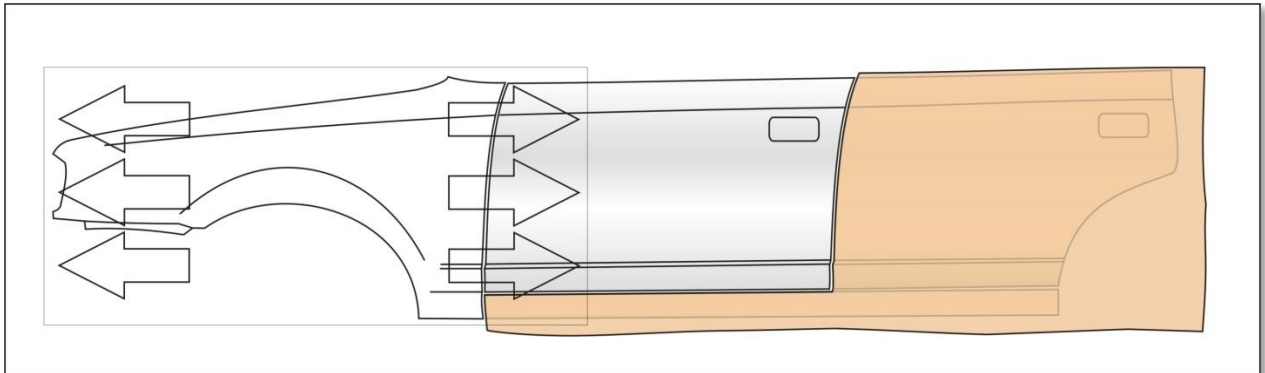
Application of Mipa WBC Beispitzlack:

Remove the masking from the door and pre-coat the door applying 1 wet closed film of Mipa WBC Beispitzlack (coating area is grey highlighted). After a short flash-off time of approx. 5 minutes, Coating 1 can be applied.



Application of Coating 1:

Apply Coating 1 on the wing fading out into the front part of the door.

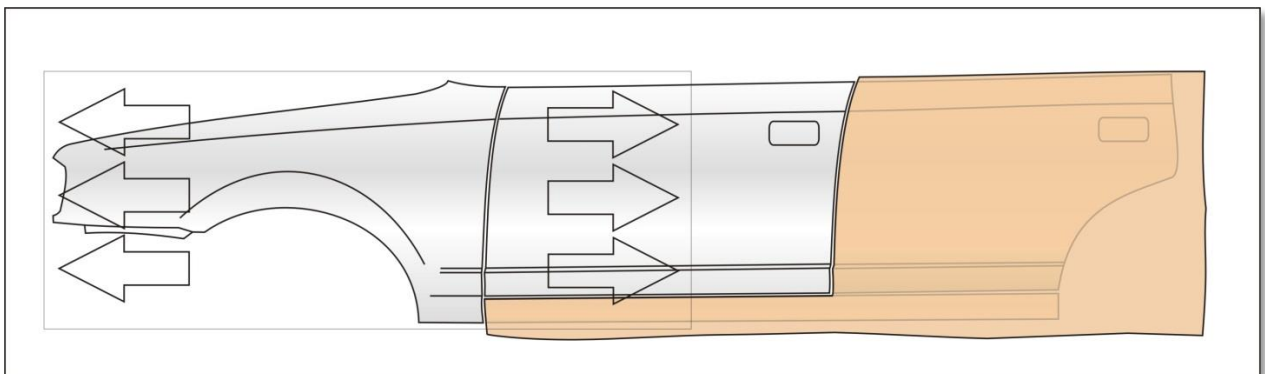


Application of Coating 2:

"Coating 2" is applied typically without hardener as follows (Mix Coating 2 immediately prior to use!):

Apply evenly 1 - 2 spray passes of the transparent colour on the wing panel and on the middle part of the door until the best possible colour and effect transition is achieved. In doing so, fade out also into the surface of the door to ensure an effect as seamless as possible and a smooth transition.

Important: The fading out zone of Coating 1 must be applied "overlapping"! The spray pressure should not exceed 2.0 bar inlet pressure to avoid mottling.



Clearcoat application:

Before applying the clearcoat, the flash-off time should be at least 20-30 minutes at room temperature or approx. 15 minutes at 40° C.

As soon as the WBC painted surface has been dried sufficiently, the clearcoat can be applied.

It is recommended to use Mipa 2K-HS clearcoats according to corresponding Mipa technical data sheets.

