



Technical Service Bulletin

AkzoNobel

Tomorrow's Answers Today

Date: 1/11/2010
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Subject: Contour Mapping & Ringing Over OEM Substrates

For the last several years, we have noticed more sensitive/critical substrates coming from the OEMs. These weak substrates may cause contour mapping to show up under the primer surfacer after the vehicle is refinished. The chance of contour mapping over critical OEM substrates can be reduced when customers follow the advice below.

The defect is not specific to any primer surfacer (brand or type) and can be seen at varying degrees of severity depending on the OE manufacturer's paint process. The use of force-cured (baking) or infrared drying of the primer surfacer is highly recommended for these critical substrates which can be recognized by the appearance of a glossy featheredge of the OE primer, basecoat and clearcoat.

Follow These Steps to Minimize the Effect:

- Make sure the primer surfacer is mixed accurately and stirred thoroughly.
- Spray a thin coat of primer surfacer on sand-through areas first. After complete drying to a matte finish (extended flash time), apply subsequent coats per the TDS and observe proper flash times.
- Extend the dry time (i.e. Colorbuild Plus: overnight dry at 70°F / 20°C) before sanding or dry the spot with an infrared according to the TDS. For air-dry applications, overnight dry provides the best results.
- If conditions are colder, use Super Top Accelerator (¼ to ½ oz to a RTS quart of Colorbuild Plus primer surfacer). Due to the speed of drying, we recommend using an etch primer or the AutoPrep Pretreatment wipe when using Super Top.

Additional Information:

- In general, drying at lower temperatures and using a slower activator could increase the risk of contour mapping.
- An average OE finish can range from 4 to 6 mils. If the vehicle has been repainted at the factory or at a body shop, the finish could reach over 10 mils. In this case two primer surfacer applications (3 coats, dry and then sand; 3 coats dry and then sand) may be required.