Permahyd® Hi-TEC 480.
Repair guidelines.
Seven golden rules for application.

1. Suitable substrates:
   - Intact, lightly sanded old paintwork
   - Permasolid® 2K acrylic surfacers such as HS Performance Surfacer 5320 or HS Vario Primer Surfacer 5340
   - Permacron® 1:1 Elastic Primer Surfacer 3300
   - Permasolid® HS Speed Surfacer 5500

   Permasolid® wet-on-wet 2K acrylic surfacers require a flash-off period of at least 15 – 30 minutes, and the waterborne base coat should be applied within 8 hours of the flash off.

2. Sand-through areas:
   - Primomat® 1K Spot Primer 4074
   - Primomat® 1K Wash Primer 4085 (for areas no larger than 5 cm Ø)
   - Permasolid® HS Vario Primer Surfacer 5340

3. Preparation and cleaning:
   - It is absolutely essential to clean the surface after sanding
   - Use Permaloid® Silicone Remover 7010
   - Subsequent cleaning with Permahyd® Silicone Remover 7080
   - Dry-sand with P 500 – P 600 and with P 1000 – P 3000 during blending-in process

4. Suitable spray guns:
   - For lower humidity and higher temperatures (<30%, 20°C-30°C), 6050 can be replaced with 6052.

   C. Interior finishes.
   - Standard application.
     Effect colour / final coat: adopt standard application
   - Tri- or multiple coat finishes.
     First coat/base colour

5. Mixing:
   - A. Standard application.
     Mixed Permahlady® Hi-TEC 480 colour
     Permahlady® Hi-TEC Hardener 3080
     Permahlady® Hi-TEC WT Additive 6050/6052

6. Mixing the additive for Permahlady® Hi-TEC 480:

7. Application:
   - Standard = 1 process step (1,5 spray passes)
     = 1 thin, closed spray pass followed by 0.5 effect spray pass from a greater distance.
   - For colours with limited covering power, pre-coat with a thin spray pass, flash-off and then proceed with standard application.

Optional cross-link first spray pass with Permahlady® Hi-TEC Hardener 3080 (see 5 B).
Blending process.

Spray base coat onto the surfacer up to the edge of the Permahyd® Hi-TEC Blending Additive 1050 / 1051.

1.8 – 2.0 bar, 1.5 spray passes = 1 process step.

Base coat application and blending into the adjoining prepared area can be carried out in a single process step.

When blending into the adjoining areas, work with a full trigger and arc-like motions.

1.8 – 2.0 bar, 1.5 spray passes = 1 process step.

Permahyd® Hi-TEC Blending Additive 1050 / 1051 is ready to spray.

1,8 – 2,0 bar, 1 – 2 thin, closed spray passes.

Please note: Use either 2 spray guns or replaceable cups.

Application of Permahyd® Hi-TEC Blending Additive 1050 / 1051 (over part or all of the surface adjoining the damaged area).

Spray base coat onto the surfacer up to the edge of the Permahyd® Hi-TEC Blending Additive 1050 / 1051.

Cleaning after sanding is very important.

Clean with a degreasing cloth and silicone remover.

Clean with Permaloid® Silicone Remover 7010 / Permahyd® Silicone Remover 7080.

Spies Hecker tack cloth.

Apply Permasolid® Clear Coat to complete the blending process.

2.0 bar, 1.5 – 2 spray passes depending on clear coat.

Please note: Use either 2 spray guns or replaceable cups.

The blending zone should be prepared with suitable tools: Orbital sander

Preparation with P1000 – P3000.

Permahyd® Hi-TEC Blending Additive 1050 / 1051 is ready to spray.

1,8 – 2,0 bar, 1 – 2 thin, closed spray passes.

Please note: Use either 2 spray guns or replaceable cups.

Application of Permahyd® Hi-TEC Blending Additive 1050 / 1051 (over part or all of the surface adjoining the damaged area).

Spray base coat onto the surfacer up to the edge of the Permahyd® Hi-TEC Blending Additive 1050 / 1051.

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Application of Permahyd® Hi-TEC Blending Additive 1050 / 1051 (over part or all of the surface adjoining the damaged area).

Spray base coat onto the surfacer up to the edge of the Permahyd® Hi-TEC Blending Additive 1050 / 1051.

1.8 – 2.0 bar, 1.5 spray passes = 1 process step.
Tri-coat colours.

Mixing ratio:

<table>
<thead>
<tr>
<th>Mixed Permahyd® Hi-TEC 480 colour</th>
<th>Permahyd® Hi-TEC Hardener 3080</th>
<th>Permahyd® Hi-TEC WT Additive 6050/6052</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>5%</td>
<td>10% solid colours</td>
</tr>
</tbody>
</table>

10% effect colours (6052 recommended)

Please note:
For tri-coat applications:
- Only add hardener to the base colour, water is optional
- No hardener for effect colours

Dry-sand the area to be repaired and/or the new part with an orbital sander and P500 – P600. Carefully prepare the adjoining and/or blending area with a suitable abrasive.

Blending area:
Preparation with P1000 – P3000.

Clean with a suitable degreasing cloth and silicone degreaser.

Clean with Permaloïd® Silicone Remover 7010 / Permahyd® Silicone Remover 7080.

Spies Hecker tack cloth.

The effect colour is applied from the fade-out zone up to the damaged area, in other words from the outside in, into the blending additive (wet-on-wet). The application method is the same for any additional effect spray passes that may be required. The overlapping zones will shift.

1.8 – 2.0 bar, 1 – 3 thin spray passes depending on the required effect.

Spray base colour onto the area to be repaired and onto the adjoining blending area until coverage is achieved. The fade-out area is in the wet Permahyd® Hi-TEC Blending Additive 1050 / 1051.

1.8 – 2.0 bar, 1 – 2 thin spray passes.
Do not flash off Permahyd® Hi-TEC Blending Additive 1050 / 1051.

Flash-off time: 5 minutes
Drying: 10–15 minutes at 60°C allow to cool down

Apply Permasolid® HS Clear Coat in a single process step.

2.0 bar, 1.5 spray passes depending on clear coat.

Apply Permasolid® HS Clear Coat

Flash off until the surface is matt.
Can be force dried.

Coat at least three sample panels with the base colour. Apply a different number of spray passes for the pearl effect paints, in order to re-create the colour and/or pearl effect.

Spray base colour onto the area to be repaired and onto the adjoining blending area until coverage is achieved. The fade-out area is in the wet Permahyd® Hi-TEC Blending Additive 1050 / 1051.

1.8 – 2.0 bar, 1 – 2 thin spray passes.
Do not flash off Permahyd® Hi-TEC Blending Additive 1050 / 1051.

1.8 – 2.0, 1 – 2 thin, closed spray passes.
Do not flash off Permahyd® Hi-TEC Blending Additive 1050 / 1051.
Interior finishes.

Mixing ratio.

<table>
<thead>
<tr>
<th>Mixed Permahyd® Hi-TEC 480 colour</th>
<th>Permahyd® Hi-TEC Hardener 3080</th>
<th>Permahyd® Hi-TEC WT Additive 6000/6002</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>10%</td>
<td>10% solid colours 20% effect colours</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Optional 10% demineralised water</td>
</tr>
</tbody>
</table>

Application time after addition of the Permahyd® Hi-TEC Hardener 3080:
- Effect colours: 30 – 60 minutes at +20°C
- Solid colours: 45 – 60 minutes at +20°C

Clean with degreasing cloth and silicone remover.
Clean with Permaloid® Silicone Remover 7010.
Spies Hecker tack cloth.

Apply a Spies Hecker wet-on-wet surfacer.

Please note:
The surfacer provides mechanical and chemical resistance and offers excellent adhesion for the subsequent paint system.

1.3 – 1.4 mm, 1 – 2 spray passes.

Interior finishing of the engine compartment.
This mixture is only intended for interior finishes. It should not be used for exterior paintwork.

1.2 – 1.3 mm, 1.5 spray passes.

The addition of the Permahyd® Hi-TEC Hardener 3080 provides resistance to chemical and mechanical damage. The satin gloss achieved is precisely adapted to the required gloss level of the original interior paintwork.

5 – 10 minutes flash-off time
15 – 20 minutes oven drying at 60°C or air dry overnight

Recommended products:
- Raderal® Plastic Putty 2015 black
- Permasolid® HS Putty Surface 5320 (elasticised)
- Permasolid® HS Vario Primer Surfacer 5340 (elasticised)
- Permasolid® 1K UV Primer Surfacer 9002
- Priomat® 1K Wash Primer 4085
- Permasolid® HS Speed Surfacer 5500
- Percron® Speed Blender 1036
- Permahyd® Hi-TEC Base Coat 480
- Permasolid® HS Speed Clear Coat 8800
- Permasolid® HS Optimum Plus Clear Coat 8650

Areas recommended for Speed Repair:
- Corners and edges
- Small areas
- Lower body or add-on parts

The damaged area should not exceed a maximum 4 – 5 cm Ø.

Speed Repair process.
Permahyd® Hi-TEC 480.

Product range.

### Permabhyd® Hi-TEC

#### System Component A

- **Permahyd® Hi-TEC WT Additive 6050 / 6052**
  - Controls development of the effect
  - Improves flow behaviour
  - Prevents mottling
- **Permahyd® Hi-TEC WT 6050 / standard, Hi-TEC WT 6052 / low humidity, (< 30%, 20°C – 30°C)**
  - 10% for solid colours or 20% for effect colours

#### System Component B

- **Technological components that give the Hi-TEC system its outstanding product features: viscosity, application, film formation, strength of effect, hardness**

### Permabhyd® Hi-TEC Blending Additive 1050 / 1051

- **Permahyd® Hi-TEC Blending Additive 1050 / 1051**
  - Achieves a uniform, smooth fade-out zone in the base coat
  - Optimum overspray absorption
  - Easy to use
  - Excellent surface wetting
  - Additive for Speed Repair
  - Slightly milky in appearance after application – transparent when dry
  - No changes in colour

### Permabhyd® Hi-TEC Hardener 3080

- **Intended for**
  - Multi-colour finishes
  - Tri-coat applications
  - Interior finishes
  - Permasolid® HS Speed Clear Coat 8800
- **Ensures good chemical and mechanical resistance even without clear coat application (for interiors only)**

### Permabhyd® Hi-TEC Flop Control WT 386

- **Flop Control WT 386**
  - Enhances the strength of the effect
  - Part of various different mixing formulas
  - Can also be used for Speed Repair

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### Mixing ratio.*

- **Permabhyd® Hi-TEC Flop Control WT 386**
  - **Permahyd® Hi-TEC Blending Additive 1050**
    - Mixed**
  - **Permabhyd® Hi-TEC 480 colour**
  - 10%

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### Instructions

- **Clean with a degreasing cloth and silicone remover.**
- **Remove dust.**
- **Clean with Permahyd® Silicone Remover 7080.**
- **Spies Hecker degreasing or cleaning cloth.**
- **Use a tack cloth.**
- **Spies Hecker tack cloth.**
- **Apply the base coat in 3 – 5 thin spray passes.**
  - Apply each coat with an overlap.
  - With low pressure at 0.8 – 1.5 bar.
- **Flash-off times can be shortened with drying tools.**
- **Flash-off until the surface looks matt.**
- **Apply the clear coat in 1.5 spray passes.**
  - e.g. Permasolid® HS Clear Coats.
- **Use Permacron® Speed Blender 1036 for the fade-out zones.**
  - 1 – 2 closed spray passes.
  - 8 - 10 minutes.

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* Permahyd® Hi-TEC WT Additive 6050/6052 may be added.