Masking and Bonding Powder Coating Solutions
3M Powder Coat Masking and Bonding Solutions

Masking

3M™ Powder Coating 8991 and 8992 Polyester Masking Tapes

With pressure sensitive silicone adhesive, 3M™ Polyester Tapes 8991 and 8992 grab on contact for reliable masking in most powder coat painting operations with baking up to 204°C.

- Clean removal, with a sharp clean paint edge. Also used for masking in electroplating, anodising and as a flashbreaker.
- 8991 Blue – 0.025mm polyester backing and 0.036mm silicone adhesive.
- 8992 Green – 0.052mm polyester backing and 0.030mm silicone adhesive.
- Resists shrinking, curling and edge lifting.
- Available with polyester liners for die-cutting and conversion.

Pre-Powder Coat Bonding

3M™ VHB™ GPH General Purpose High Temperature

A firm acrylic adhesive allows 3M VHB GPH to deliver a high strength bond between metal parts. The composition of the 3M VHB GPH family allows the tape to resist high temperatures making it ideal for use on jobs that go through a powder coating process.

3M™ Scotch-Weld™ Structural Acrylic Adhesives DP8805NS and DP8405NS

3M next generation structural acrylic adhesives provide a faster bond, deliver higher impact resistance and high temperature performance, helping you to build better products and improve productivity.

- Fast curing, low odour.
- Non-sag.
- 5 Minutes Work Life.
- Time to handling strength 7 minutes (DP8805NS) and 15 minutes (DP8405NS) approximately.

3M™ Scotch-Weld™ Acrylic Adhesives strength at high temperature

Tested to ASTM D1002 Standard Test Method

- Ability to hold weight at powder coat temperatures.
- Parts bonded at room temperature for 30 minutes.
- 30 Minutes at 200°C

3M™ Scotch-Weld™ Acrylic Adhesives strength at room temperature after going through powder coat temperatures

Tested to ASTM D1002 Standard Test Method

- Etched Aluminium Substrates
- Tested at 23˚C 24 Hours after heat soak

Control 30 minutes at 200°C 1 hour at 200°C Control 30 minutes at 200°C 1 hour at 200°C
Why choose a tape or adhesive?

Benefits of Tape and Adhesive Bonding Solutions;
✓ Improves aesthetics
✓ Weight reduction
✓ Quick and easy application

Benefits of a tape solution;
✓ Very strong bond that can replace spot welds and rivets
✓ Provides instant handling

Benefits of an adhesive solution:
Even stronger bonds that give structural strength
✓ Smaller bond areas required
✓ Quick cure time
✓ Repositionable

Post Powder Coat Bonding

3M™ VHB™ Tape 5952
3M VHB Tape 5952 acrylic foam tape gives a strong bond on powder coated surfaces and difficult to stick surfaces.

3M™ Scotch-Weld™ Structural Acrylic Adhesive DP8405NS
► Over three times the impact strength of conventional acrylic adhesives.
► Fast curing with an 18 months shelf life.

3M™ Scotch-Weld™ Urethane Adhesive DP620NS
► High performing two component polyurethane.
► Easy mixing, exceptional non-sag formulation.
► Suitable for bonding to a wide variety of substrates including painted surfaces.
<table>
<thead>
<tr>
<th>3M Product</th>
<th>Powder Coat Masking</th>
</tr>
</thead>
</table>
| 3M™ 8991 Polyester Powder Coat Masking Tape* | 0.025mm polyester backing.  
|  | 0.036mm silicone adhesive.  
|  | *Also available in linered and log roll format. |

| 3M™ 8992 Polyester Powder Coat Masking Tape* | 0.052mm polyester backing.  
|  | 0.030mm silicone adhesive.  
|  | *Also available in linered and log roll format. |

<table>
<thead>
<tr>
<th>3M™ VHB™ GPH</th>
<th>Pre-Powder Coat Bonding</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High temperature resistance (150˚C Continuous, 230˚C Intermittent)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3M™ Scotch-Weld™ Structural Acrylic Adhesive DP8805NS</th>
<th></th>
</tr>
</thead>
</table>
|  | Fast curing, low odour  
|  | Bondline control 250μm  
|  | Non-sag  
|  | 5 Minutes Work Life*  
|  | Time to Handling Strength 7 minutes*  
|  | 10 Minutes Structural Strength* |

<table>
<thead>
<tr>
<th>3M™ Scotch-Weld™ Structural Acrylic Adhesive DP8405NS</th>
<th>Post-Powder Coat Bonding</th>
</tr>
</thead>
</table>
|  | Fast curing  
|  | Bondline control 250μm  
|  | High impact strength  
|  | Non-sag  
|  | 5 Minutes Work Life*  
|  | Time to Handling Strength 15 minutes*  
|  | 20 Minutes Structural Strength* |

<table>
<thead>
<tr>
<th>3M™ VHB™ Tape 5952</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adheres to painted and difficult to bond surfaces usually without the need for specialist surface preparation including priming or abrading</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3M™ Scotch-Weld™ Structural Acrylic Adhesive DP8405NS</th>
<th></th>
</tr>
</thead>
</table>
|  | Fast curing  
|  | Bondline control 250μm  
|  | High impact strength  
|  | Non-sag  
|  | 5 Minutes Work Life*  
|  | Time to Handling Strength 15 minutes*  
|  | 20 Minutes Structural Strength* |

<table>
<thead>
<tr>
<th>3M™ Scotch-Weld™ Urethane Adhesive DP620NS</th>
<th></th>
</tr>
</thead>
</table>
|  | High performing  
|  | Best Gap Filling  
|  | Low temperature flexibility |

*All times quoted are approximate