tesa® ACXplus FOR EXTERIOR APPLICATIONS

Our Attachment Part Mounting Solutions for the Automotive Industry
Constructive bonding of attachment parts to car bodies can be very challenging as traditional mechanical fasteners like rivets, welds, and screws may not be suitable for dissimilar materials such as glass, metal, and plastics. Adhesive tapes permanently and gently join materials without causing damage.

**tesa® ACXplus** is a new category of double-sided tapes for constructive bonding and is our highest performing product line. tesa® ACXplus was especially developed for applications in the automotive industry to securely bond exterior attachment parts to the car body.

### Applications

1. Emblem
2. Shark fin antenna
3. Pillar appliqué
4. Body side molding
5. Rocker panel
... and many more

Attachment parts like emblems, body side moldings, and roof ditch trims need to be securely mounted to exterior car body surfaces, and the bond has to withstand all external influences throughout the vehicle’s lifetime.

**Acrylic Foam Tapes for Constructive Bonding**
The tesa® ACX™ tapes securely mount attachment parts to the car body and at the same time provide reliable sealing and vibration damping. The unique tapes also compensate for thermal expansion and ensure excellent stress dissipation. Their high level of adaptability allows perfect attachment to the car body’s curves and corners.

Bonding power
tesa® ACX™ creates a powerful bond even between materials with different surface characteristics, such as automotive attachment parts and clear coats. Our product performance characteristics ensure:
- Reliable bond on clear coat and other vehicle parts even after short dwelling time
- Securing of the parts’ edges against lifting
- Very high reliability throughout the vehicle’s lifetime
- Design flexibility with limited bonding area

Stress dissipation
During the lifetime of a vehicle, static and dynamic stresses act upon the constructive bond between the car body and the attachment part. These can be caused by different thermal elongation of the respective substrates. Due to the viscoelastic behavior of tesa® ACX™, the stresses can be optimally dissipated, and a secure bond is assured even during extreme temperature changes.

Temperature and weather resistance
The reliable constructive bonds of tesa® ACX™ are resistant to extreme temperatures and temperature changes, different weather conditions, UV radiation, and also chemical influences.

Deep black color
When mounting automotive attachment parts with self-adhesive tapes, the tape will, at best, not be visible after the part has been attached to the car body. This enhances the overall appearance and, therefore, customer satisfaction. The deep black color of tesa® ACX™ Black Line 78XX series ensures minimum visibility between the attachment part and the car body, thus contributing to an appealing car design.

Unique conformability
Due to the high conformability, tesa® ACX™ is applicable in curves and corners without lifting of the liner. In addition, minor surface irregularities of the parts bonded together can be compensated for, so that a maximum adhesion surface is achieved for a long-lasting bond.

Water sealing
tesa® ACX™ creates a permanent sealing that is impermeable to water and other solvents such as washer fluids. This ensures an excellent humidity sealing and prevents corrosion throughout the lifetime of the vehicle.

Noise prevention
The strong, closed-cell foam construction of tesa® ACX™ combined with its high bonding power significantly damps vibrations and reduces unwanted sounds.
We offer an entire assortment:
tesa® ACX™ helps customers to optimize self-adhesive bonding and application processes. We offer worldwide support including laboratory testing and expert advice regarding application and dispensing tools.

### Product range

<table>
<thead>
<tr>
<th>Thickness of tape [µm]</th>
<th>Adhesive</th>
<th>Color</th>
<th>Backing</th>
<th>Peel adhesion</th>
<th>ABS</th>
<th>Cold shock performance</th>
<th>Dynamic shear resistance</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Steel</td>
<td>RT 3 days [Nm/cm]</td>
<td>Steel after cyclic aging [500h] [Nm/cm²]</td>
<td>Steel after cyclic aging [90°C] [Nm/cm²]</td>
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<td>tesa® 78103</td>
<td>500</td>
<td>Modified acrylic</td>
<td>Deep black</td>
<td>Acrylic foam</td>
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</table>

* tesa® standard clear coat

### Liner assortment

<table>
<thead>
<tr>
<th>Available on</th>
<th>Thickness [µm]</th>
<th>Material</th>
<th>Color</th>
<th>Tensile Strength [N/cm]</th>
<th>Elongation at Break [%]</th>
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<tbody>
<tr>
<td>tesa® PV25</td>
<td>122 PE-coated paper</td>
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<td>&gt; 73</td>
<td>&lt; 5.0</td>
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<tr>
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<td>tesa® PV28</td>
<td>130 Silicon-free HDPE film</td>
<td>Royal blue</td>
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<td>Royal blue</td>
<td>&gt; 30</td>
<td>&gt; 300</td>
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</tbody>
</table>

### Tabbing tapes

#### Adhesive tabbing tapes

- tesa® 54929
  - 78XX PV29: 150 Silicone PET > 100 > 75
- tesa® 54988
  - 77XX PV29: 200 Synthetic rubber PET > 100 > 75

#### Heat tabbing film

- tesa® 50999
  - PV29 and PV29: 150 LDPE PET > 40 > 75

tesa® products prove their impressive quality day in, day out in demanding conditions and are regularly subjected to strict controls. All technical information and data above mentioned are provided to the best of our knowledge on the basis of our practical experience. They shall be considered as average values and not appropriate for a specification. Therefore tesa SE can make no warranties, express or implied, including, but not limited to any implied warranty of merchantability or fitness for a particular purpose. The user is responsible for determining whether the tesa® product is fit for a particular purpose and suitable for the user’s method of application. If you are in any doubt, our technical support staff will be glad to support you.
Our management system is certified according to the standards ISO 9001, ISO/TS 16949, and ISO 14001. All our products delivered to automotive customers are listed in the International Material Data System (IMDS).