

A close-up, rear-quarter view of a silver car, showing the rear door, a side mirror, and a taillight. The car is moving, as indicated by the motion blur in the background. The tesa logo is visible on the rear of the car.

# tesa<sup>®</sup> ACX<sup>plus</sup> FOR EXTERIOR APPLICATIONS

**Our Attachment Part Mounting Solutions  
for the Automotive Industry**



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

# Acrylic Foam Tapes for Constructive Bonding

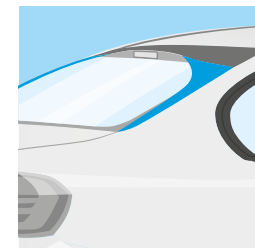
Attachment part mounting with tesa® ACX<sup>plus</sup> for the automotive industry

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



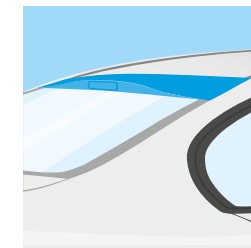
Attachment parts like emblems, body side moldings, and roof ditch trims need to be securely mounted to exterior car body surfaces, and the bond has to withstand all external influences throughout the vehicle's lifetime.



Aeroflap



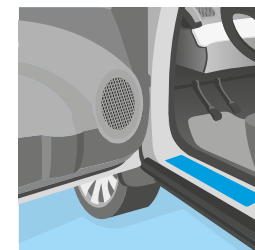
Body side molding



Brake light spoiler



Door edge molding



Doorsill trim



Emblem



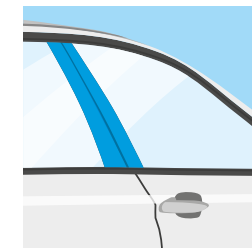
Fender flare



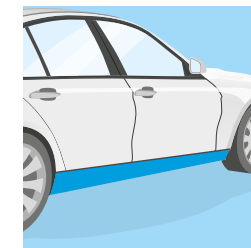
Headlight washer



Park distance sensor



Pillar appliqué



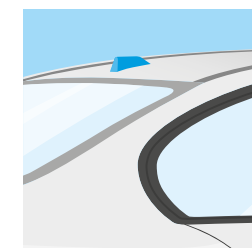
Rocker panel



Roof ditch trim



Roof rail



Shark fin antenna



Trunk molding



Window frame



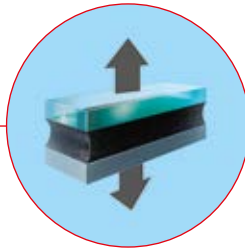
## Features and benefits of using tesa® ACX<sup>plus</sup>

The tesa® ACX<sup>plus</sup> 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

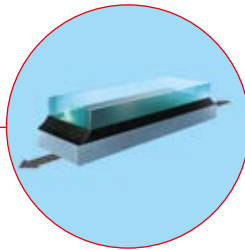
tesa® ACX<sup>plus</sup> creates a powerful bond even between materials with different surface characteristics, such as automotive attachment parts and clear coats. Our product performance characteristics ensure:

- 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



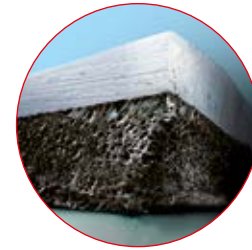
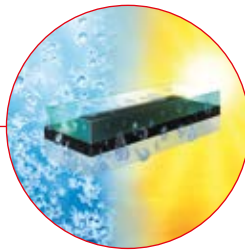
### Stress dissipation

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<sup>plus</sup>, the stresses can be optimally dissipated, and a secure bond is assured even during extreme temperature changes.



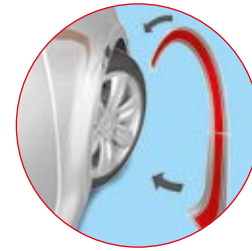
### Temperature and weather resistance

The reliable constructive bonds of tesa® ACX<sup>plus</sup> 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<sup>plus</sup> Black Line 78XX series ensures minimum visibility between the attachment part and the car body, thus contributing to an appealing car design.



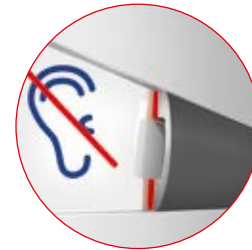
### Unique conformability

Due to the high conformability, tesa® ACX<sup>plus</sup> 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<sup>plus</sup> 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<sup>plus</sup> combined with its high bonding power significantly dampens vibrations and reduces unwanted sounds.

# COMPLETE PACKAGE

## Product range

	Thickness of tape [µm]	Adhesive	Color	Backing	90° peel adhesion					Cold shock performance	Dynamic shear resistance		
					Steel	ABS	PP/EPDM primed with tesa® 60153	Clear coat*	Clear coat* after 40°C	Clear coat*	Clear coat*	Steel after climatic cycle	Steel after 90°C aging
					RT 3 days [N/cm]	RT 3 days [N/cm]	RT 3 days [N/cm]	RT 3 days [N/cm]	100% r.h. 7 days [N/cm]	-30°C	RT 24h [N/cm²]	RT 9 days [N/cm²]	500h [N/cm²]
tesa® 7805	500	Modified acrylic	Deep black	Acrylic foam	21	18	60	25	32	Excellent	90	92	155
tesa® 7808	800	Modified acrylic	Deep black	Acrylic foam	26	22	80	27	33	Excellent	83	91	170
tesa® 7811	1,100	Modified acrylic	Deep black	Acrylic foam	32	24	90	30	36	Excellent	80	77	160
tesa® 7812	1,200	Modified acrylic	Deep black	Acrylic foam	32	24	90	30	36	Excellent	80	77	150
tesa® 7815	1,500	Modified acrylic	Deep black	Acrylic foam	35	28	100	31	37	Excellent	78	70	145
tesa® 77108	800	Modified acrylic	Black	Soft acrylic foam	27	25	72	23	37	Very good	97	207	282
tesa® 77112	1,200	Modified acrylic	Black	Soft acrylic foam	28	26	73	25	46	Very good	70	192	262
tesa® 77115	1,500	Modified acrylic	Black	Soft acrylic foam	34	30	70	28	48	Very good	78	189	259

\* tesa standard clear coat

## Liner assortment

	Available on	Thickness [µm]	Material	Color	Tensile Strength [N/cm]	Elongation at Break [%]
tesa® PV25	78XX-series	122	PE-coated paper	White	> 73	< 5.0
tesa® PV26	771XX-series	160	PE-coated paper	White	> 73	< 3.0
tesa® PV28	771XX-series	130	Silicon free HDPE film	Royal blue	> 10	> 300
tesa® PV29	78XX-series	130	Heat sealable and adhesive tabable film	Royal blue	> 30	> 300

We offer an entire assortment:

tesa® ACX<sup>plus</sup> 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.



Die cuts



Desk dispenser



Application tools



## Adhesion promoters

	Surface	Drying	UV traceability	Application time	Toluene content
tesa® 60151	Glass	Min. 30 sec. **	No	5 min	None
tesa® 60152	PU, PVC	Min. 2 min. **	Yes	Several days ***	None
tesa® 60153	PP/EPM	Min. 30 sec. **	Yes	Several days ***	None

\*\* Solvent has to be flashed off  
\*\*\* Surface has to stay free of dust

## Tabbing tapes

	For product	Thickness [µm]	Adhesive	Backing	Tensile strength [N/cm]	Elongation at break [%]
<b>Adhesive tabbing tapes</b>						
tesa® 54999	78XX PV29	150	Silicone	PET	> 100	> 75
tesa® 54988	771XX PV28	200	Synthetic rubber	PET	> 100	> 75
<b>Heat tabbing film</b>						
tesa® 50999	PV28 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 are 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).