

The background of the entire page is a photograph of a man with short brown hair and a light beard, looking intently at a piece of yellow tape with white circular perforations. The tape is being processed by a machine with various rollers and gears. The man is wearing a dark blue shirt. The overall scene is industrial and focused on precision work.

Tape solutions for custom applications

Assortment for Converter Partners



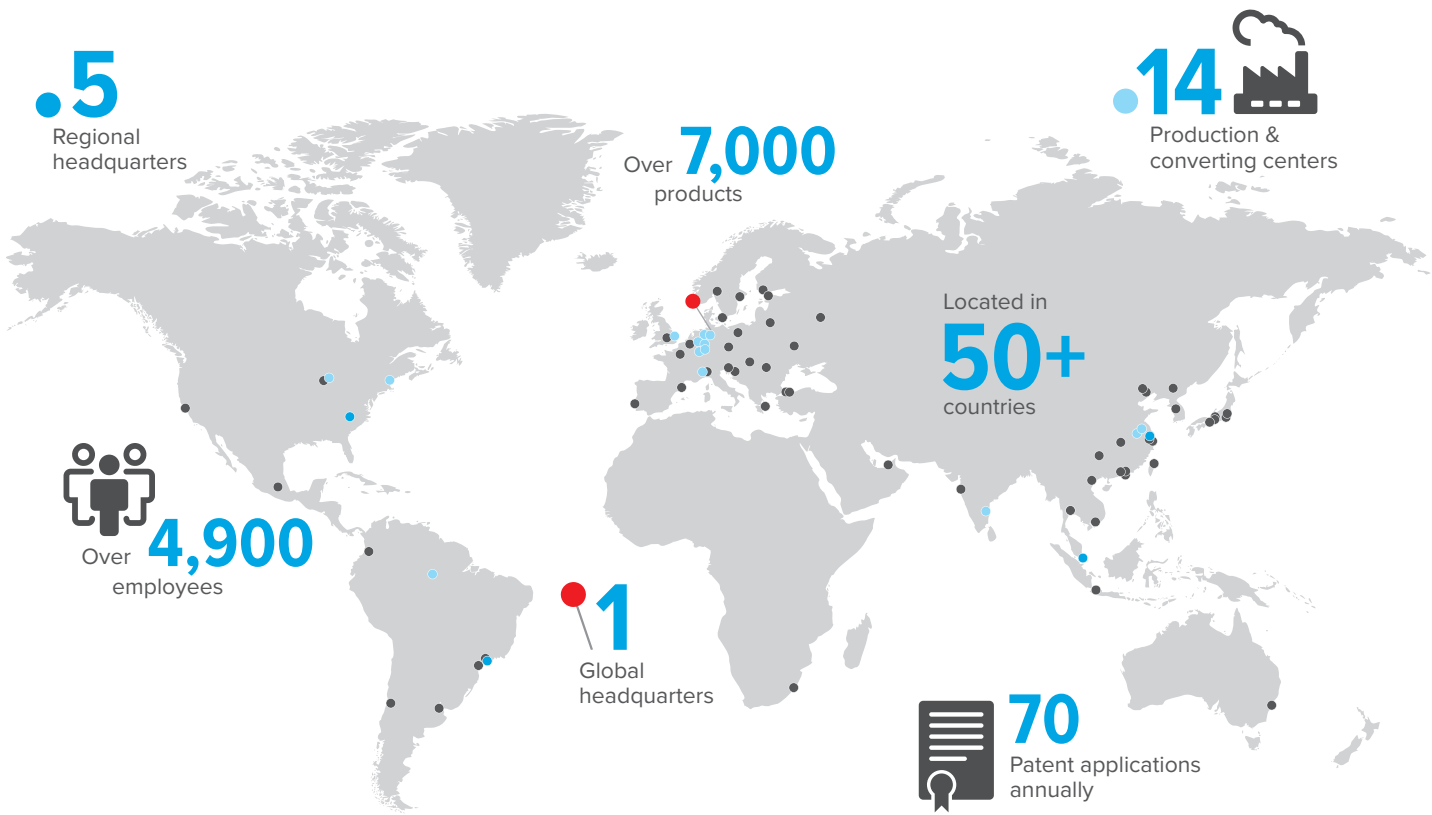
Table of contents

By your side		5	
Sustainability agenda		7	
Pressure-sensitive adhesive basics		9	
Core assortment for Converters	Bonding & lamination	tesa® ACX ^{plus} acrylic core tapes	21
		Double-sided foam tapes	23
		Double-sided filmic tapes	25
		Double-sided tissue tapes	27
		Transfer tapes	29
		Bond & Detach®	31
	Masking & surface protection	Paper masking tapes	35
		Design masking tapes	37
		Powder coating	37
		Surface protection	37
Customer Solution Center		39	



By your side

About us



Your adhesive solutions partner

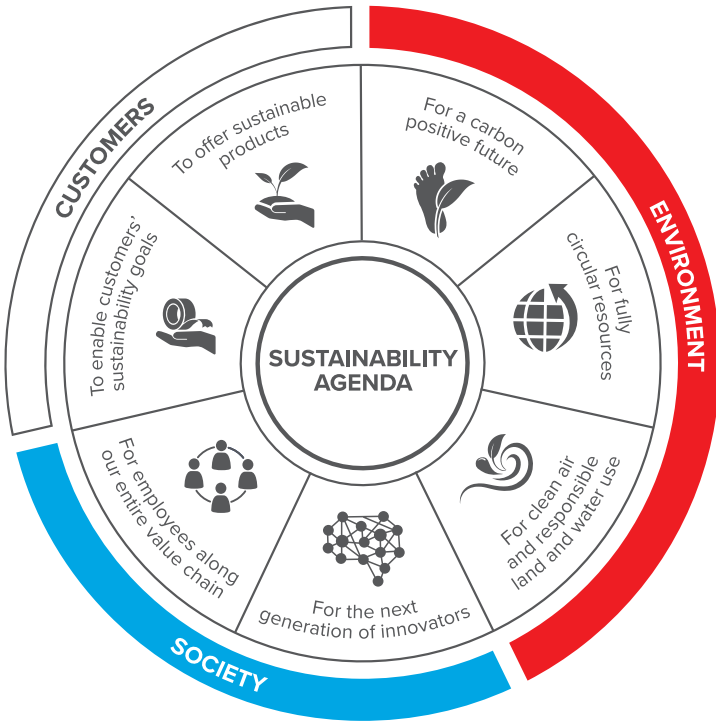
tesa's story began in 1890 and today is one of the world's leading manufacturers of technical adhesive tapes and self-adhesive system solutions, with an assortment of more than 7,000 products. Our solutions prove their performance in countless sectors around the globe, also thanks to a capillary network composed of thousands of distribution and converting partners.

Industrial applications - in sectors such as the automotive and transportation industries, electronics, printing and paper, building supply, healthcare and renewable energy- account for about 75% of the tesa group's sales. This allowed us to build a solid expertise and market intimacy that we channel in our continuous product developments.

Sustainability agenda

A compass for a positive change

As one of the world’s leading adhesive technology companies, at tesa we make an important contribution by firmly anchoring sustainability in our core business processes and decisions and driving equitable growth for the benefit of all stakeholders.



Environment

Contributing to climate protection and circular economy by reducing our environmental footprint along the product life cycle.

Customers

Expanding the range of sustainable products and enabling customers to meet their sustainability goals.

Society

Ensuring good working conditions for employees along our entire value chain and empowering the next generation of innovators.

Goals and pillars

To meet our commitments, we have defined a set of goals and indicators aligned with our Sustainability Agenda:

Environment

- Reduce energy-related CO2 emissions absolute by 30% versus 2018
- Purchase solely renewable electricity and switch to clean energy sources for electricity production
- Strive for smarter chemicals
- Achieve zero waste to landfill

Customers

- Increase sales with sustainable products
- Strive for sustainable packaging
- Increase share of recycled and renewable materials

Society

- Source 80% of direct spend from responsible suppliers
- Strive for zero accidents
- Empower young people through education in STEM

Did you know?



Sustainable products

We promote the transition to recycled and/or renewable material in our products.

Increased share of sustainable products



Carbon neutrality

We are accelerating our work to reach a zero-carbon footprint by 2050 – focusing on efficiency, green energy and low-carbon products & solutions.

Significant reduction of absolute carbon emissions



Responsible supply chains

We monitor key suppliers' sustainability practices by using EcoVadis.

Ensure we work only with suppliers that adhere to social and environmental standards

A strong track record in 2020



tesa awarded CDP “B”-rating for climate engagement



100% green electricity purchased for all sites and investment decision for solar panels at plant in China



23% absolute CO2 reduction compared to 2018



Headquarters and tesa Converting Center awarded „Sicher mit System“ quality seal for occupational safety



EcoVadis: tesa belongs to top 15% in the industry



31% of direct spend from responsible suppliers

You want to learn more?

To know more about our Sustainability agenda visit our website: <https://www.tesa.com/en-us/about-tesa/sustainability>






Pressure-sensitive adhesive basics

The role of polarity

Surface tension

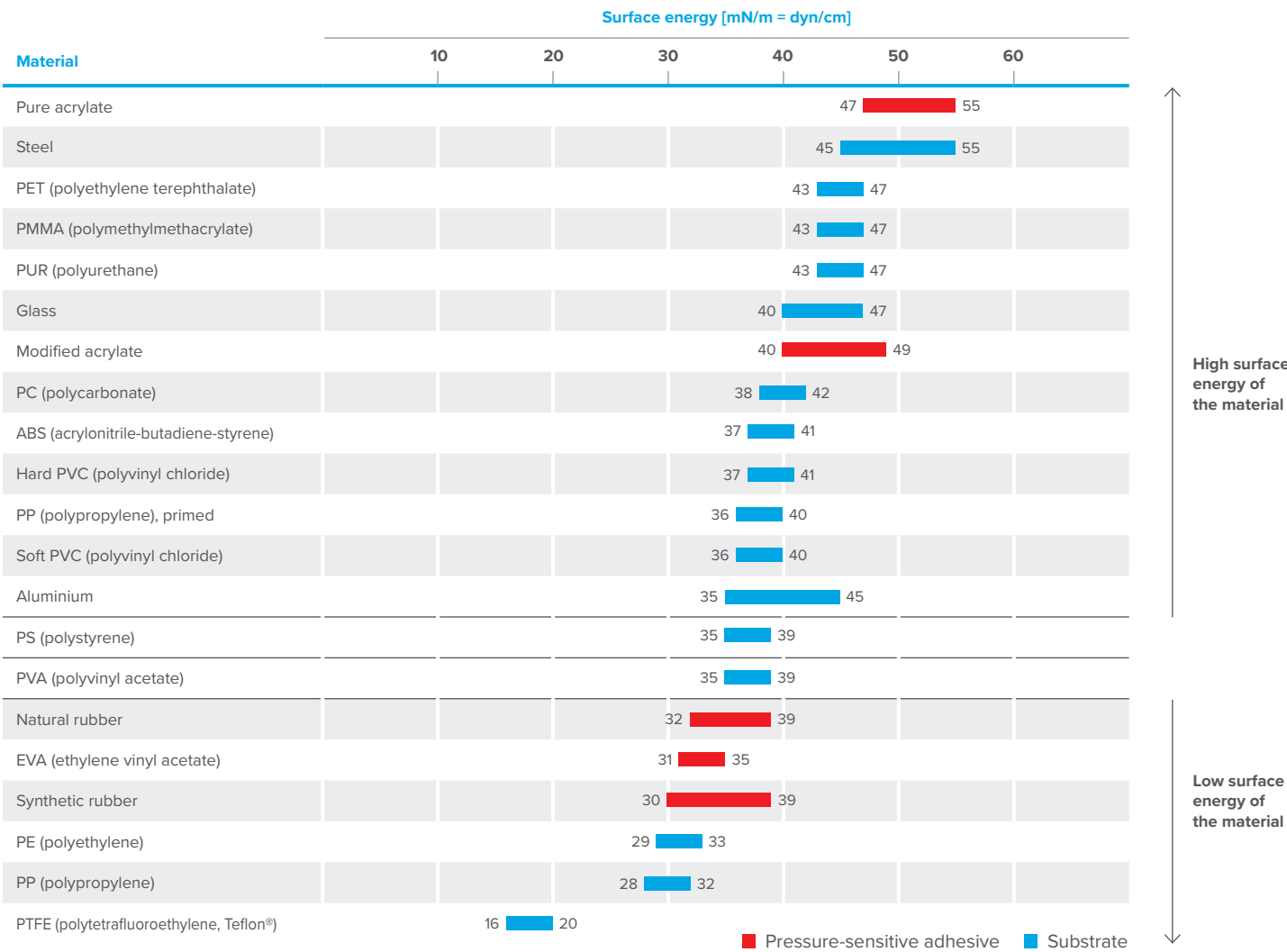
In order to achieve sufficient contact points for the formation of high adhesion forces, the pressure-sensitive adhesive must be able to sufficiently wet the substrate to be bonded. Wetting largely depends on the surface tension or energy of the substrate and the pressure-sensitive adhesive.

A pressure-sensitive adhesive is generally able to wet-out a substrate if the substrate's surface energy is greater than or equal to that of the adhesive. The higher the wet-out, the more contact points are available to form a bond between two surfaces. As a first indication one can use a water droplet to differentiate between high and low surface energy substrates. If the droplet forms a film, this points to a high surface energy. On the other hand, if it stays a droplet or drips off, it points to a lower surface energy than water. In this case, bonding to the substrate may be difficult.

			
Wettability	Poor	Good	Very good
Surface energy	Pressure-sensitive adhesive > substrate	Pressure-sensitive adhesive = substrate	Pressure-sensitive adhesive < substrate

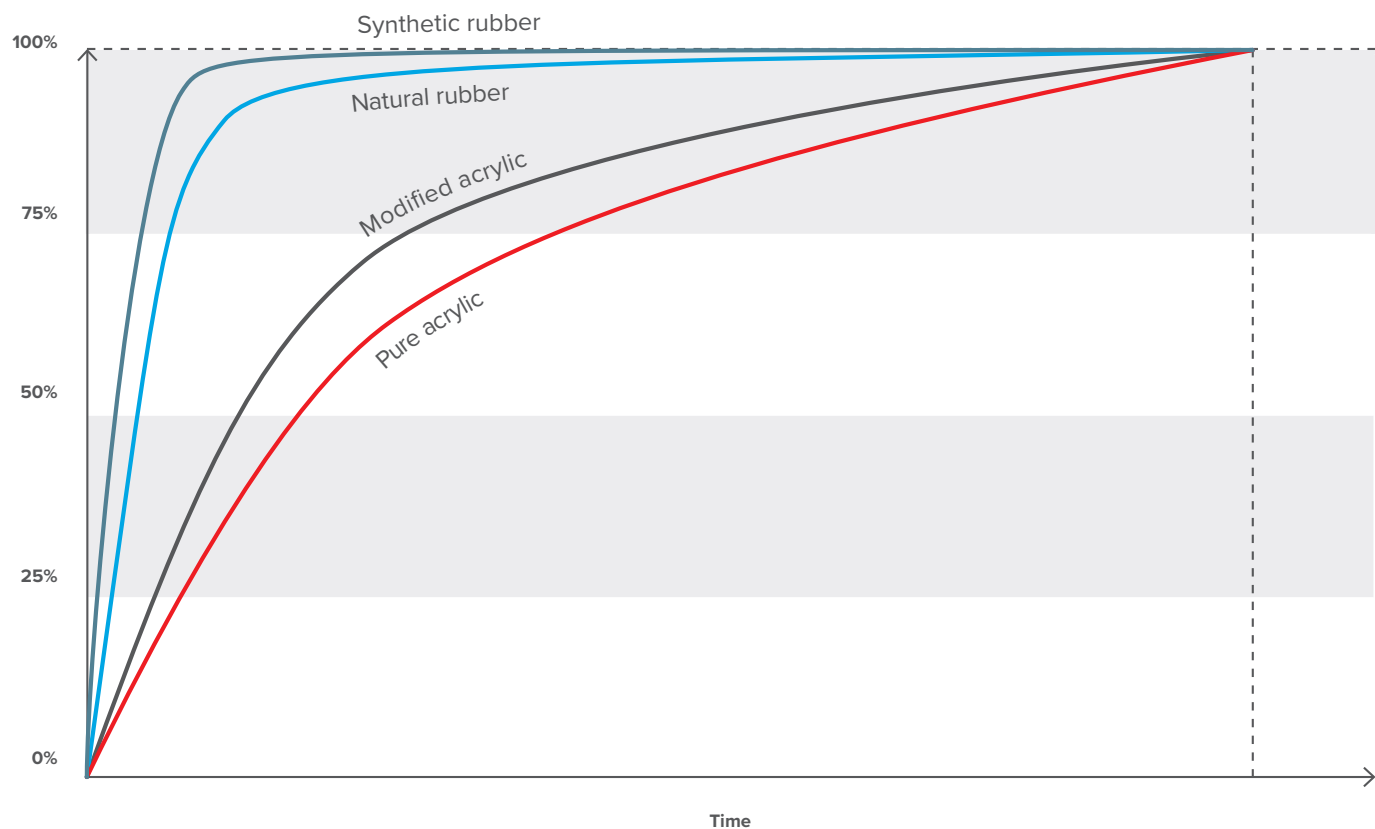
More accurate results are achieved with so-called test inks, which are also available in pen form. The surface energy is given in mN/m, dyn/cm or sometimes also in mJ/m², whereby: 1 mN/m = 1 dyn/cm.

The boundary between low-energy and high-energy surfaces is usually drawn in the range of a surface energy of 36 – 38 mN/m. Therefore, the bondability for surface tensions above this range is usually problem-free, whereas at values below this range a pretreatment of the surface to be bonded should be considered.



Peel adhesion and tape structure

Initial and ultimate peel adhesion



Due to the viscoelastic character of an adhesive tape the peel adhesion increases over time. The time needed to achieve the ultimate peel adhesion strongly depends on factors such as the type of adhesive mass, temperature, contact pressure and substrate. This behavior is described as the initial and ultimate peel adhesion.

As the chart shows, both synthetic and natural rubber pressure-sensitive adhesives require less time to reach the ultimate peel adhesion than acrylic-based pressure

sensitive adhesives. As a rule of thumb, it takes 72 hours to achieve the ultimate peel adhesion of acrylic adhesives. With the use of a bonding agent (adhesion promoter) the time needed to achieve the ultimate peel adhesion is typically reduced.

Higher temperatures also significantly reduce the time needed to achieve the ultimate peel adhesion. At lower processing temperatures, a much longer time is once again required to achieve the ultimate peel adhesion.

Adhesive tape structure

All adhesive tapes consist essentially of a backing material and at least one self-adhesive layer of adhesive. The product structures shown on the right are typical for single-sided and double-sided adhesive tapes.

The adhesive and backing materials are adapted to the specific application requirements of each tesa® adhesive tape solution. Examples of adhesive masses are acrylics, natural rubber and synthetic rubber.

Examples of backings are film, paper, tissue and foam. In order to help you choose the appropriate adhesive tape, we offer product ranges for the various fields of application. These include, for example, adhesive tapes for surface protection, masking, bundling and permanent bonding in the automotive, electronics, construction or furniture industries.

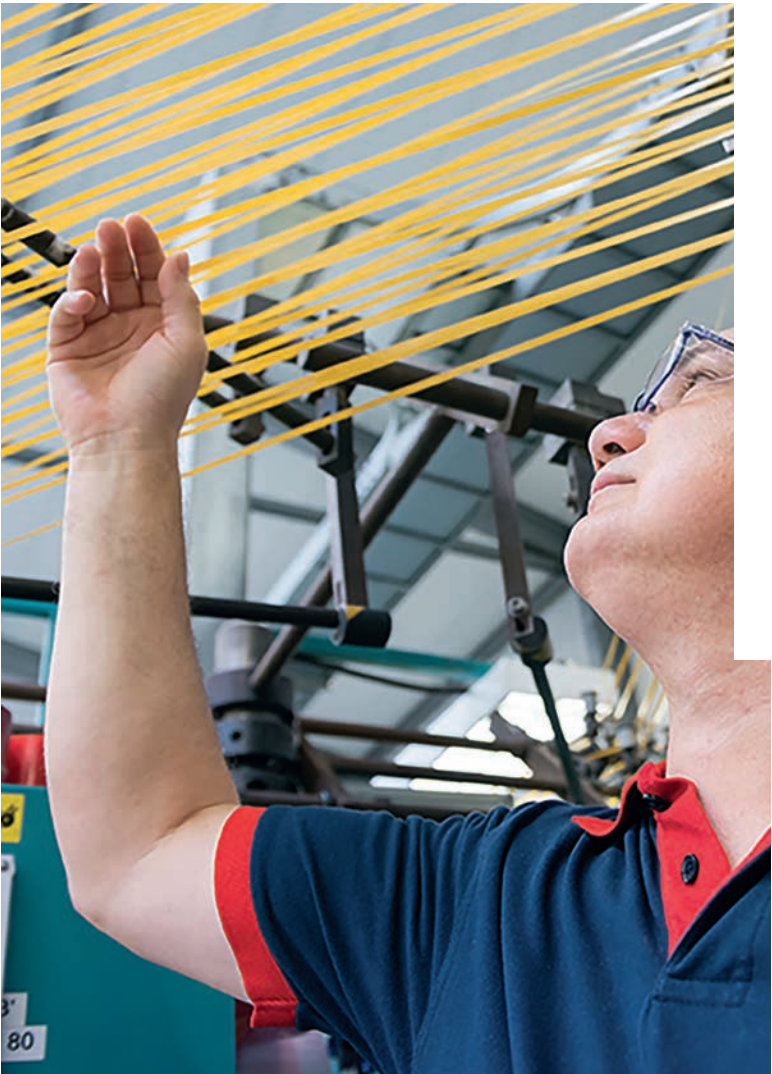
Product structure single-sided adhesive tape:

- 1 Rear surface release coating
- 2 Backing
- 3 Primer
- 4 Pressure-sensitive adhesive



Product structure double-sided adhesive tape:

- 1 Separation cover (siliconized)
- 2 Pressure-sensitive adhesive (covered side)
- 3 Primer
- 4 Backing
- 5 Primer
- 6 Pressure-sensitive adhesive (open side)



Core assortment for Converters

Product overview

Application	Category	Tapes	Page
Bonding & lamination	tesa® ACX ^{plus} acrylic core tapes	7065, 7074, 7273, 7274, 7812, 45065	21
	Double-sided foam tapes	45001, 55576, 62508, 62512, 62856, 62936, 64956	23
	Double-sided filmic tapes	4965, 4968, 4970, 4972, 4982, 45051, 51966, 51970, 58372, 59652, 61395, 64620, 64621	25
	Double-sided tissue tapes	4943, 4959, 4962, 51571, 52210, 52215	27
	Transfer tapes	52105, 52110, 58328, 58394, 58395, 58398, 75505, 75507, 75515	29
	Bond & Detach®	70415, 70425, 70465, 70499	31
Masking & surface protection	Paper masking tapes	4309, 4316, 4317, 4325, 4334, 4338, 4341, 4342	35
	Design masking tapes	4174, 4244	37
	Powder coating tapes	50600, 50650, 61126	37
	Surface protection tapes	4848, 50535, 51136, 58353	37





Bonding & lamination

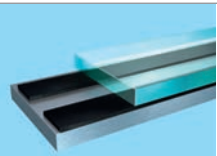
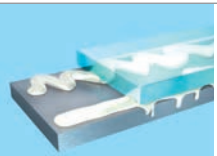
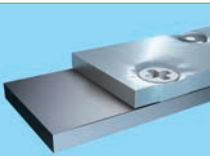










The world of double-sided tapes

In many industries double-sided tapes are an important bonding solution. They are used in cars, electronic devices, household appliances, facade elements, windows and doors, glass partition walls, elevators, furniture, etc.

Compared to other bonding technologies like welding, screws, nails, and liquid glue, double-sided adhesive tape provides many advantages.

Depending on the tape’s specific characteristics, they also dissipate stress due to their viscoelastic behavior, prevent oxidation, and are resistant to UV radiation, extreme temperatures, humidity, aging, and chemicals.

Advantages of double-sided tape vs. liquid glue and mechanical fastening

Advantages of double-sided tape vs. liquid glue and mechanical fastening			Double-sided tape	Liquid glue	Mechanical fastening (e.g., rivets, screws, nails)
					
Design		Improved visual appearance – no damage to the material	• • • •	• • •	•
		Invisible fastening – mounting of transparent materials	• • • •	• • •	•
Assembly		Fast application process – elimination of curing time and reduction of complexity	• • • •	•	• •
		Healthy working environment and clean production sites	• • • •	• •	• •
Quality		Compensation of irregular or uneven surfaces – gaps between bonded surfaces are eliminated	• • •	• • • •	•
		Compensation of tension and stress dissipation – single bonding point with mechanical fasteners can lead to material breakage	• • • •	• •	•
		Noise-dampening properties – sounds caused by vibration are eliminated	• • • •	• • •	•
		Shock absorption	• • • •	• •	•
		Sealing function – tape seals and protects against dust and moisture	• • • •	• • • •	• •
		Reduced risk of corrosion	• • • •	• • • •	•



The structure of double-sides tapes

Adhesive tapes consist of various functional layers. The adhesive layer can be applied to either one or both sides of the backing (to create single- or double-sided tape). The typical structure of double-sided adhesive tapes is outlined in the following diagram. Our double-sided tapes consist of five main components:

Structure of double-sided adhesive tape:

- 1 Release liner (silicon coated)
- 2 Adhesive (closed side)
- 3 Primer
- 4 Backing
- 5 Primer
- 6 Adhesive (open side)



Backing

The backing is relevant for some of the main features of a double-sided tape. For rough surfaces, thicker foam tapes come into play. Thinner filmic tapes can be used for transparent bonding requirements and high-performance tapes are able to dissipate stress thanks to their viscoelastic behavior.

Liner

Some adhesive tapes have special separating layers, the so-called release coating and the release liner, on the top side, so that the adhesive tape on the roll does not stick to the layer above it. Siliconized papers or films are the main types of release liners. The optimal liner choice depends on the application. If die-cut ability is required, polyester liners are preferable. If the tape is exposed to humidity, poly-coated papers are mainly used due to their dimensional stability. For most applications, paper liners are the liners of choice.

Adhesive System

The proper choice of the adhesive depends on how the double-sided tape is to be used: the kind of surfaces and materials which are to be bonded, how long the bond is supposed to last, and whether it is an indoor or an outdoor application.

Primer

Often, the backing consists of plastic, for example, because that is the most sensible solution for this area of use. However, there are plastics and other materials which adhesive does not stick well to. Polyethylene (PE), polypropylene (PP), Teflon, rubber and silicone are some of these. Experts speak of “very low surface energy.” The actually “exciting” thing about a primer is: it increases this surface tension, which lets the backing and the adhesive stick to each other more strongly.

Backings

Backing	Description
tesa® ACX ^{plus}	<ul style="list-style-type: none">• Viscoelasticity• Bonding power• Stress dissipation• Temperature and weather resistance
Foam tapes	<ul style="list-style-type: none">• Compensation of tension, gaps and irregular surfaces• High bonding power even o rough surfaces• Excellent shock absorption• Sealing function against dust and moisture
Film tapes	<ul style="list-style-type: none">• High tensile strength• Well suited for die-cut production• For high-speed manufacturing processes
Cloth tapes	<ul style="list-style-type: none">• Flexible• High temperature resistance• Thick backings are abrasion resistant
Non-woven tapes	<ul style="list-style-type: none">• Flexible and extremely conformable• Hand tearable, but nick resistance• Cushioning features

Liners

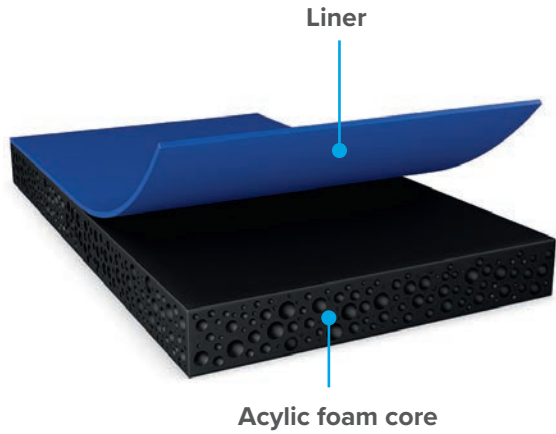
Product features/advantages	Color	Thickness [µm mils]	Weight [g/m²]	Breaking force [N/cm lbs/in]
Siliconized paper <ul style="list-style-type: none">• Low electric discharge• Stable under pressure due to hard paper core	Brown	70 / 2.7	82	>63 / 36
PE (polyethylene) coated paper <ul style="list-style-type: none">• Good tensile strength• Excellent die-cutting properties• Excellent humidity resistance	White	122 / 4.8	120	>73 / 41.7
PP (polypropylene) release film <ul style="list-style-type: none">• Dust-free convertibility• High tear resistance• Safe use in automated processes	Red	80 / 3.1	72	>80 / 102.8
		120 / 4.7	108	>180 / 102.8
PET (polyethylene terephthalate) release film <ul style="list-style-type: none">• Excellent tear strength• Good thickness tolerance• Dust-free processing	Trans-parent	50 / 1.9	72	>70 / 40
		75 / 2.9	109	>100 / 57.1
PE (polyethylene) release film <ul style="list-style-type: none">• Flexible and soft for easy application on curved surfaces• No fraying during the sawing process	Dark blue	100 / 3.9	94	>16 / 9.1

Adhesive systems

	Description	Attributes
Pure acrylic	Pure acrylic adhesive is especially suitable for outdoor applications and applications at elevated temperatures	<ul style="list-style-type: none">• Good adhesive strength on polar and pretreated non-polar surfaces• Very good performance -at elevated temperatures• Restistance against environmental conditions (e.g. UV, humidity) and aging
Tackified acrylic	Tackified acrylic is a versatile adhesive with a well-balanced performance on a wide variety of surfaces for permanent applications	<ul style="list-style-type: none">• Very good adhesive strength on polar surfaces, good on non-polar surfaces• High initial adhesion power• Restistance against environmental conditions (e.g. UV, humidity) and aging
Water-based acrylic	Water-based acrylic adhesives are solvent-free and thus feature low VOC emissions. They are quite versatile and perform well in lamination and lightweight mounting applications.	<ul style="list-style-type: none">• Low VOC• High tack• Good adhesion to polar substrates• Good heat and aging resistance• Poor adhesion to non-polar substrates• Preferred for indoor use or temporary outdoors applications
Synthetic rubber (SiS)	SiS adhesive is suitable for a variety of surfaces but offers limited aging and temperature restistance	<ul style="list-style-type: none">• High immediate adhesive bonding strength• Good shear resistance• Very good bonding on polar and non-polar surfaces
Natural rubber	Natural rubber adhesive is extremly sticky for use on rough surfaces	<ul style="list-style-type: none">• High immediate adhesive bonding strength• Very good bonding on polar and non-polar surfaces• Preferred for use in indoor applications

tesa® ACX^{plus} acrylic core tapes

Constructive bonding is a key element in every industry and can be very challenging. Traditional mechanical fasteners like rivets, welds, screws, or liquid glue may not be suitable or can even damage the substrates. That is where our high-performance bonding tapes come into play. tesa®ACX^{plus} is an acrylic foam tape with very special bonding capabilities based on its viscoelasticity: this leads to elastic and viscous characteristics, providing inner strength as well as relaxation of mechanical stresses. tesa® ACX^{plus} bonding solutions can outperform conventional fastening methods by optimizing our customers’ production processes and the quality and aesthetics of their product.



Main features

Good bonding

Con-formable

Temperature resistant

Environmental resistance

Good wetting

Bonding of dissimilar materials

UV resistance

Impact resistance

Compressible

Chemical resistance

Quick bonding

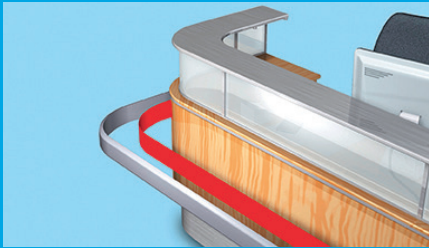
Cold shock resistance

LSE

Application examples



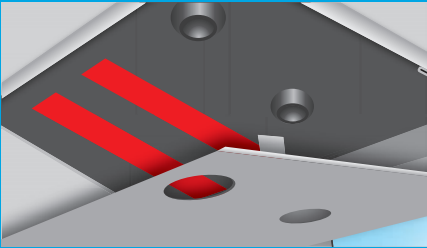
Emblem mounting in transportation



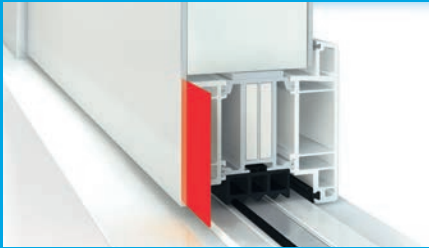
Bumper-rails mounting



Mounting of signs and displays








Interior mounting in transportation



Door panel mounting



Attachment part mounting in automotive

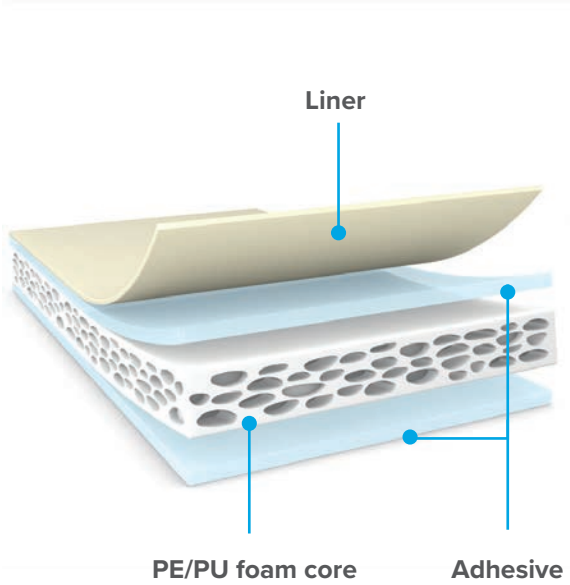
					Thickness			Standard log roll width			Core material/ diameter	Adhesion to steel -Ultimate		Temperature resistance short / long term				Adhesion to ABS - Ultimate		Adhesion to PVC - Ultimate		Ageing resistance	Humidity resistance	
Product	Description		Backing	Adhesive	Liner	µm	mils	Color	mm	in		N/cm	oz/in	°C short-term	°C long-term	°F short-term	°F long-term	N/cm	oz/in	N/cm	oz/in			
tesa® ACXplus 7065 High Adhesion		Acrylic foam tape designed for bonding „hard-to-bond“ materials, such as powder coatings or plastic materials; for permanent indoor applications.	Foamed acrylic	Tackified acrylic	PE-coated paper	1200	47.3	●	1260	49.6		PE / 3"	48	438.5	170	70	338	158	30	274.1	39	356.3	●	●
tesa® ACXplus 7074 Cold Shock		Acrylic foam tape for permanent demanding outdoor bonding applications; outstanding cold shock, UV, chemicals, salt water and cleaning agent resistance.	Foamed acrylic	Pure acrylic	HDPE filmic	1000	39.4	●	1240	48.8		PE / 3"	33	301.5	220	120	428	248	6	54.8	12	109.6	●	●●
tesa® ACXplus 7273 Multi-Purpose		Acrylic foam tape suitable for a wide range of general bonding applications, such as mounting of emblems, decorative parts and signs.	Foamed acrylic	Pure acrylic	Filmic white w/ logo	800	31.5	●	900	35.4		PE / 3"	28	255.8	200	100	392	212	Values measured only for tesa® ACXplus Specialties					
tesa® ACXplus 7274 Multi-Purpose			Foamed acrylic	Pure acrylic	Filmic white w/ logo	1000	39.4	●	900	35.4		PE / 3"	28	255.8	200	100	392	212						
tesa® ACXplus 7812 High Adhesion		Closed cell acrylic foam tape showing high bonding power on MSE clear coats and plastics, as well as impressive cold shock, humidity and UV resistance.	Foamed acrylic	Tackified acrylic	HDPE filmic	1200	47.3	●	1200	47.2		PE / 3"	32	292.4	80		176		24	219.3	32	292.4	●●	●●
tesa® ACXplus 45065 Flame-Retardent		Acrylic foam tape designed for applications requiring flame retardancy; allows for compensation of thermal elongation and good adhesion on various substrates.	Filled acrylic	Pure acrylic	PE-coated paper	1200	47.3	○	500	19.7		PE / 3" red	37	338.0	200	100	392	212	22	201.0	27	246.7	●	●

Contact your tesa representative for information about additional product thicknesses.

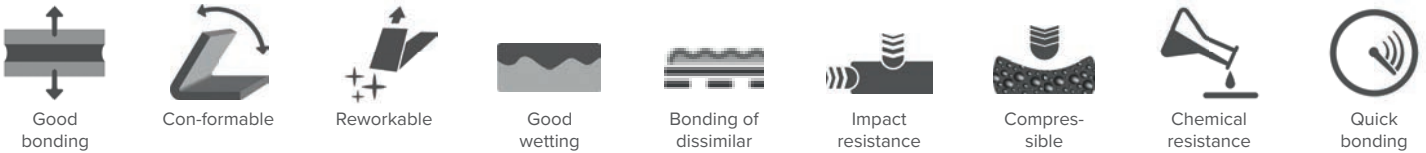
Double-sided foam tapes

Double-sided foam tapes are a broad category which includes products that, thanks to the characteristics of their backing, can be used to compensate for gaps, bond different substrates, and dampen unwanted noises or vibrations.

Depending on the foam and adhesive composition, they can be suitable for lightweight or more demanding mounting applications, permanent or temporary, even on LSE surfaces. Some may also be used for outdoors applications, thanks to their resistance against UV, humidity and ageing.



Main features



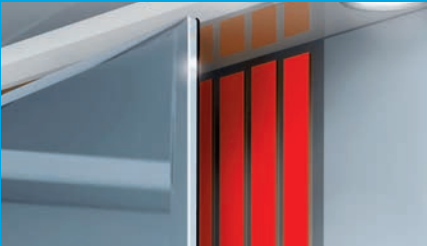
Application examples



Mounting of signs and displays



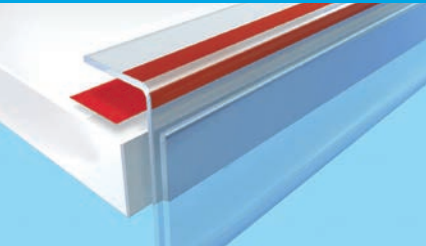
Deco glass mounting in appliances



Mirror mounting



Deco panel mounting in furniture



Store shelf edge mounting



Interior wall cladding

Product	Description	Backing	Adhesive	Liner	Thickness			Standard log roll width		Core material/ diameter	Adhesion to steel -Ultimate		Adhesion to PE- Ultimate		Adhesion to PVC - Ultimate		Temperature resistance short / long term				Static shear resistance 23°C / 73°F	Ageing resistance	Humidity resistance
					µm	mils	Color	mm	in		N/cm	oz/in	N/cm	oz/in	N/cm	oz/in	°C short-term	°C long-term	°F short-term	°F long-term			
tesa® 45001 Flame-Retardent	Double-sided PE foam tape for permanent mounting in demanding applications; flame-retardant according to FAR 25.853(a) and UL 94 HBF–HF1.	PE foam (flame retardant)	Acrylic (flame retardant)	MOPP	1000	39.4	○	1360	53.5	PE / 3" red	22	201.0	5*	45.7*	21*	191.9*	80	80	176	176	●	●●	●●
tesa® 55576	Double-sided PE foam tape for light duty mounting of trims & profiles, POS signs, advertising material and mirror pre-mounting.	PE foam	Acrylic	PE-coated paper	1200	47.3	○	1020	40.2	Paper / 3"	5.5	50.2	1.4	12.8	3	27.4	80	60	176	140	●	●	●
tesa® 62508	Conformable double-sided, highly-compressed PE foam tape for general mounting applications; fully outdoor suitable, resistant against UV and water and aging.	PE foam	Tackified acrylic	HDPE filmic	800	31.5	◐	1360	53.5	Paper / 3"	13.5	123.3	0.9	8.2	13.5	123.3	80	80	176	176	●	●●	●●
tesa® 62512		PE foam	Tackified acrylic	HDPE filmic	1200	47.3	◐	1360	53.5	Paper / 3"	13.5	123.3	0.9	8.2	13.5	123.3	80	80	176	176	●	●●	●●
tesa® 62856	Conformable double-sided PE foam tape suitable for mounting small trims and name-plates, especially those with filligree designs.	PE foam	Pure acrylic	MOPP	1200	47.3	●	1240	48.8	Paper / 3"	17	155.3	2	18.3	9	82.2	100	90	212	194	●●	●●	●●
tesa® 62936	Thick double-sided PE foam tape for a variety of constructive mounting applications; fully outdoor suitable and resistant against UV, water, ageing and cold shocks.	PE foam	Tackified acrylic	Glassine paper	1600	63.0	◐	1360	53.5	Paper / 3"	19	173.6	3	27.4	19	173.6	80	80	176	176	●	●	●●
tesa® 64956	Conformable double-sided PE foam tape for general mounting applications; immediate bonding strength even on rough, uneven surfaces and LSE surfaces.	PE foam	Synthetic rubber	Glassine paper	800	31.5	◐	1400	55.1	Paper / 3"	15	137.0	12	109.6	15	137.0	60	40	140	104	●	●	●

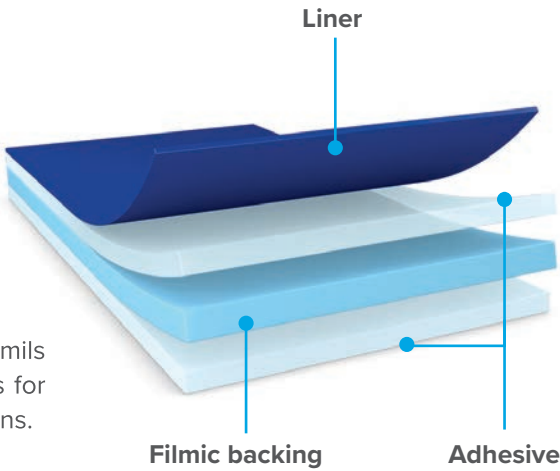
Contact your tesa representative for information about additional product thicknesses.

* tesa® 45001 estimated values ●● very good ● good ○ discrete - poor

Double-sided filmic tapes

Double-sided filmic tapes are relatively thin, dimensionally stable, and are ideal for bonding to flat, smooth surfaces such as glass, metal, and non-embossed plastics. Nevertheless, thicker tapes offer good performance also on rough, hard to stick surfaces and generally offer a good temperature resistance.

The wide range of thicknesses from 48 µm / 1.9 mils to 300 µm / 11.8 mils offer multiple performance and design to cost options. Selected tapes for lamination and converting applications also offer very low VOC emissions.



Main features

High bonding

Excellent on smooth surfaces

Quick bonding

Chemical resistance

Excellent die-cutting

Temperature resistant

Environmental resistance

Low and Ultralow VOC

Transparent bonding

Product	Description	Backing	Adhesive	Liner	Thickness			Standard log roll width	
					µm	mils	Color	mm	in
tesa® 4965	High performance transparent PET double-sided tape; reliable bond even on hard to stick surfaces and under critical conditions.	PET	Tackified acrylic	MOPP	205	8.1	⊗	1372	54.0
tesa® 4968	PVC double-sided tape with high UV-stability, chemical resistance and flame retardancy; exceptional bonding to low energy or rough substrates. For general mounting applications.	PVC	Tackified acrylic	Glassine paper	295	11.6	○	1372	54.0
tesa® 4970	Thick, PVC double-sided tape with high tack, immediate adhesion and good performance on rough or dusty surfaces; suitable for long term mounting of signage, POS materials and trims.	PVC	Tackified acrylic	Glassine paper	225	8.9	○	1372	54.0
tesa® 4972	Thin, double-sided tape with a high adhesion level and excellent resistance to demanding environmental conditions.	PET	Tackified acrylic	PE- coated paper	48	1.9	⊗	1250	49.2
tesa® 4982	Great bonding strength-to-thickness ration; provides reliable adhesion in high temperature applications.	PET	Tackified acrylic	MOPP	100	3.9	⊗	1372	54.0
tesa® 45051	Transparent, flame retardent PET tape for permanent mounting; excellent flexibility and converting properties.	PET	Acrylic (flame retardent)	MOPP	200	7.9	⊗	1360	53.5
tesa® 51966	Transparent PET double-sided tape with high initial tack and adhesion; suitable for long term mounting applications and designed for converter and tape specialist business.	PET	Acrylic	Glassine paper	200	7.9	⊗	1372	54.0
tesa® 51970	Transparent PP double-sided tape with high tack and adhesion, and a secure bond on critical materials such as PP, PE and rough surfaces; good temperature resistance and outdoor suitability.	PP	Tackified acrylic	Glassine paper	220	8.7	⊗	1372	54.0
tesa® 58372	Thin, transparent, flame retardent PET tape for permanent mounting; excellent flexibility and converting properties.	PET	Tackified acrylic	Glassine paper	50	2.0	⊗	1250	49.2
tesa® 59652	Black double-sided PET tape equipped with our proven tesa® 4965 adhesive; outstanding holding power even to LSE surfaces and powder painted substrates.	PET	Tackified acrylic	Glassine paper	205	8.1	●	1372	54.0
tesa® 61395	Black, double-sided tape with high bonding strength, excellent push out resistance and high shock resistance.	PET	Tackified acrylic	Glassine paper	200	7.9	●	1240	48.8
tesa® 64620	Double-sided PP tape with solvent-free adhesive for general purpose attachment applications.	PP	Synthetic Rubber	Glassine paper	185	7.3	○	1400	55.1
tesa® 64621	Double-sided PP tape with solvent-free adhesive for general purpose attachment applications.	PP	Synthetic Rubber	Glassine paper	90	3.5	○	1400	55.1

Application examples

Mounting of signs and displays

Decorative trims & profiles mounting

Lens and LCD mounting in electronics

Mounting of displays and LCD panels in appliance

Floor laying solutions

Battery pack mounting in EVs

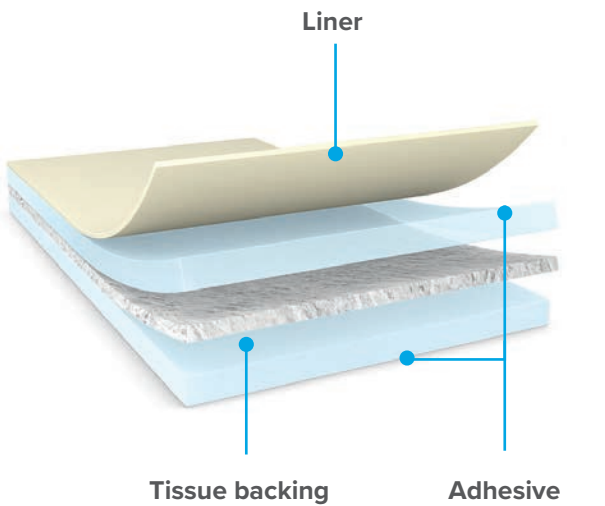
Core material/ diameter	Adhesion to steel -Ultimate		Adhesion to PE- Ultimate		Adhesion to PVC - Ultimate		Temperature resistance short / long term				Static shear resistance	Tack	Ageing resistance	Humidity resistance
	N/cm	oz/in	N/cm	oz/in	N/cm	oz/in	°C short-term	°C long-term	°F short-term	°F long-term	23°C / 73°F			
Paper / 3"	11.8	107.8	6.9	63.0	13	118.8	200	100	392	212	••	•	•	••
Paper / 3"	21.2	193.7	8.8	80.4	23	210.1	70	60	158	140	•	••	•	••
Paper / 3"	13.6	124.3	9.1	83.1	16.6	151.7	70	60	158	140	•	••	•	••
Paper / 3"	9.6	87.7	3.5	32.0	9.4	85.9	200	100	392	212	•	••	•	••
PE / 3"	11.7	106.9	5.1	46.6	10	91.4	200	100	392	212	••	••	•	••
PE / 3"	12	109.6	4	36.5	UL 94 and FAR approvals				••	•	•	••	•	••
Paper / 3"	11	100.5	7.5	68.5	13	118.8	130	80	266	176	•	••	•	••
Paper / 3"	13.5	123.3	8	73.1	17.5	159.9	130	80	266	176	•	••	•	••
PE / 3"	8.5	77.7			7.3*	66.7*		125		257	•	•	•	•
Paper / 3"	14.2	129.7	6.6	60.3	9.6	87.7	200	100	392	212	•	•	••	••
PE / 3"	17	155.3			19.5*	178.2*	200	100	392	212	•	•	••	••
Paper / 3"	14.5	132.5	8	73.1	10	91.4	80	40	176	104	•	••	•	•
Paper / 3"	15	137.0	6.5	59.4	9.5	86.8	80	40	176	104	•	•	•	•

*Adhesion to PC •• very good • good ○ discrete - poor

Double-sided tissue tapes

Tissue double-sided tapes, thanks to their non-woven or cloth backings, are conformable and flexible, allowing them to stick to irregular surfaces as needed. They are made to be easily die-cut and to be tearable by hand whilst being tear resistant.

They are in many cases suitable to quite demanding and permanent mounting applications in a variety of industries and offer a very good initial tack on most surfaces. Thanks to their flexibility, they can also be used for lamination and splicing of foams, textiles, leather and heavy papers, as well as floor laying applications.



Main features



High bonding



Conformable



Quick bonding




Chemical resistance




Good for lamination



Hand-tearable

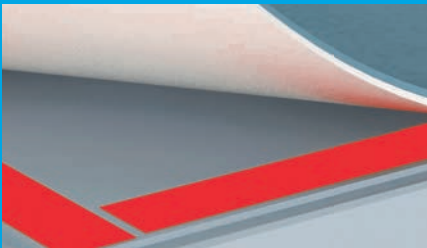


Good die-cutting

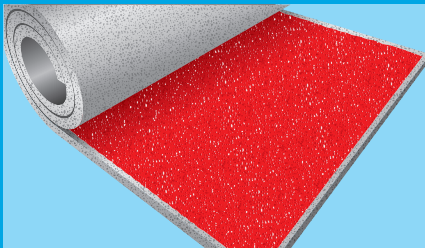


Good wetting


Application examples




Floor laying



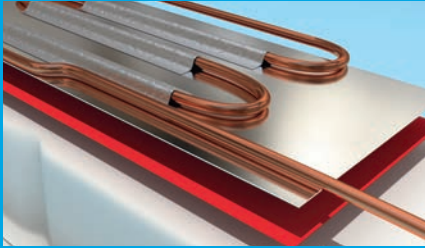
Foam lamination



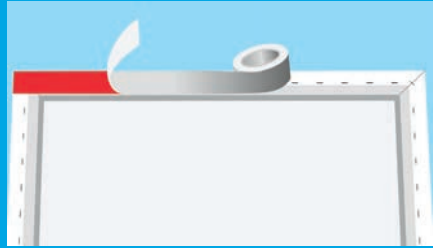
Leather mounting



Membrane switch mounting in appliances



Mounting of evaporators in appliance



General lightweight mounting

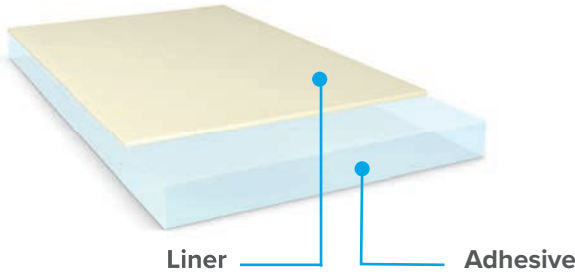
Product	Description	Backing	Adhesive	Liner	Thickness			Standard log roll width		Core material/diameter	Adhesion to steel -Ultimate		Adhesion to PE- Ultimate		Adhesion to PVC - Ultimate		Temperature resistance short / long term				Static shear resistance	Tack	Ageing resistance	Humidity resistance
					µm	mils	Color	mm	in		N/cm	oz/in	N/cm	oz/in	N/cm	oz/in	°C short-term	°C long-term	°F short-term	°F long-term				
tesa® 4943	Double-sided non-woven tape with high initial tack and good shear resistance; optimal for lamination, lightweight mounting, splicing and bag sealing.	Non-woven	Tackified acrylic	PE-coated paper	100	3.9	⊗	1220	48.0	Paper / 3"	8.1	74.0	1.6	14.6	10.8	98.7	100	70	212	158	●	●	●	●
tesa® 4959	Double-sided non-woven tape with high initial tack and good shear, UV and plasticizer resistance; optimal for lamination, lightweight mounting, splicing and bag sealing.	Non-woven	Tackified acrylic	Glassine paper	100	3.9	⊗	1372	54.0	Paper / 3"	8.5	77.7	4	36.5	14	127.9	200	80	392	176	●	●●	●●	●●
tesa® 4962	High-adhesion double-sided non-woven tape with excellent wetting power on rough surfaces and temperature resistance; optimal for mounting of plastic and foam parts, heavy papers, textiles and leather.	Non-woven	Tackified acrylic	Glassine paper	160	6.3	⊗	1372	54.0	Paper / 3"	12	109.6	7	64.0	15	137.0	200	80	392	176	●	●●	●●	●●
tesa® 51571	Double-sided non-woven tape for permanent mounting of metal and plastic materials; bonds well on uneven surfaces and shows a very high initial tack.	Non-woven	Synthetic rubber	Glassine paper	160	6.3	⊗	1400	55.1	Paper / 3"	13	118.8	8.5	77.7	13	118.8	80	40	176	104	●	●●	●	●
tesa® 52210	Double-sided non-woven tape with ultra-low VOC properties; suitable for demanding lamination and converting applications.	Non-woven	Water-based acrylic	Glassine paper	100	3.9	⊗	1500	59.1	Paper / 3"	11.2	102.3	3	27.4	11	100.5	200	80	392	176	●	●	●●	●
tesa® 52215		Non-woven	Water-based acrylic	Glassine paper	150	5.9	⊗	1500	59.1	Paper / 3"	12	109.6	5	45.7	12	109.6	190	80	374	176	●	●	●●	●

●● very good ● good ○ discrete - poor

Transfer tapes

Double-sided transfer tapes differ from other double-sided tapes in that they have no backing.

They are transparent and extremely conformable, but do not allow repositioning. Being thin but strong products, they also ensure an efficient converting and laminating process. They can be used in a variety of lamination, splicing and lightweight mounting, especially when extreme thinness and/or adhesion to flexible substrates is requested. Solvent-free production results in an environmentally friendly application process, with Low VOC features.



Main features

High bonding

Conformable

Quick bonding

Chemical resistance

Good for lamination

Transparent bonding

Low and Ultralow VOC

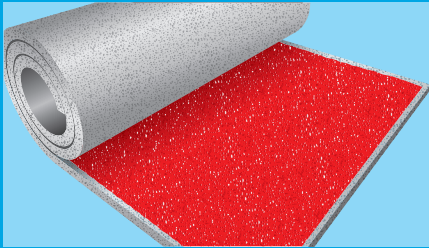
Product	Description	Backing	Adhesive	Liner	Thickness			Standard log roll width		Core material/ diameter	Adhesion to steel -Ultimate		Adhesion to PE- Ultimate		Adhesion to PVC - Ultimate		Temperature resistance short / long term				Ageing resistance
					µm	mils	Color	mm	in		N/cm	oz/in	N/cm	oz/in	N/cm	oz/in	°C short-term	°C long-term	°F short-term	°F long-term	
tesa® 52105	Conformable, water-based acrylic adhesive transfer tape with low VOC properties, good die cutting and LSE performance; suitable for laminating flexible substrates and lightweight mounting.	None	Water-based acrylic	Glassine paper	50	2.0	⊗	1500	59.1	Paper / 3"	9.5	86.8	1.8	16.4	8.9	81.3	200	80	392	176	••
tesa® 52110		None	Water-based acrylic	Glassine paper	100	3.9	⊗	1500	59.1	Paper / 3"	13	118.8	2.1	19.2	11.8	107.8	130	50	266	122	••
tesa® 58328		None	Acrylic	PET	2000	78.8	⊗	950	37.4	PE / 3"	0.57	5.2	*	*	*	*	200	125	392	257	••
tesa® 58394	A transfer tape that provides high thermal conductivity when it's applied between the heat source and heat sink to transfer the heat.	None	Acrylic	PE-coated paper	125	4.9	○	1000	39.4	PE / 3"	3.9	35.6	*	*	*	*	200	125	392	257	••
tesa® 58395		None	Acrylic	PE-coated paper	250	9.9	○	1000	39.4	PE / 3"	4.1	37.5	*	*	*	*	200	125	392	257	••
tesa® 58398		None	Acrylic	PE-coated paper	400	15.8	○	1000	39.4	PE / 3"	5.4	49.3	*	*	*	*	200	125	392	257	••
tesa® 75505	Transfer tape made of tesa® 4965 adhesive; offers very good die cutting properties, temperature and humidity resistance.	None	Tackified acrylic	Glassine paper white tesa-branded	50	2.0	⊗	1372	54.0	PE / 3"	8.5	77.7	2	18.3	11	100.5	200	100	392	212	••
tesa® 75507		None	Tackified acrylic	Glassine paper tesa-branded	75	3.0	⊗	1372	54.0	PE / 3"	11	100.5	4.5	41.1	13	118.8	200	100	392	212	••
tesa® 75515		None	Tackified acrylic	Glassine paper white tesa-branded	125	4.9	⊗	1372	54.0	PE / 3"	12	109.6	6	54.8	15	137.0	200	100	392	212	••

*Contact your tesa representative for information about adhesion performance and thermal conductivity. •• very good • good ○ discrete - poor

Application examples



Signage mounting



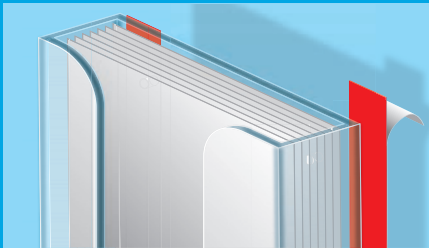
Foam lamination



Leather mounting



Splicing of heavy papers



Mounting of POS displays



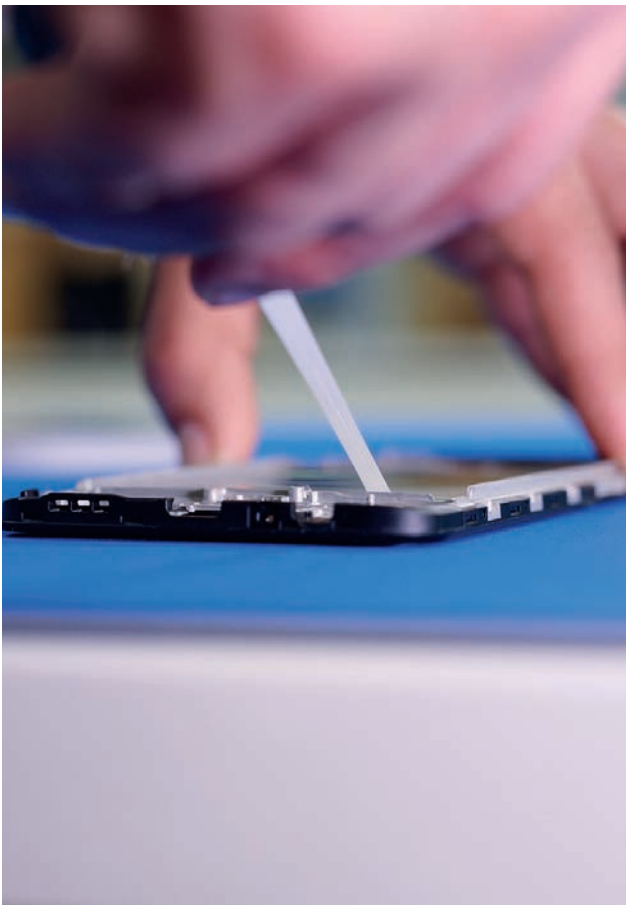
Membrane switch mounting in appliances

Bond & Detach®

Stretch-release tapes for residue-free removability

Our Bond & Detach® solutions have revolutionized the removability of adhesives. This tape enables the permanent mounting of components with the option of removing them without residues. Bond & Detach® uses a unique adhesive technology for demanding bonding applications, that can be removed without leaving any residue by stretching it.

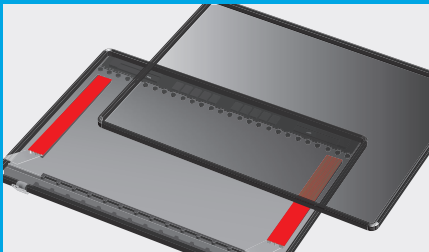
The patented technology was developed by tesa and offers the possibility of simple and secure debonding during the entire product life cycle – from production to end of life. It can also be used for temporary fixation during production processes or transportation. In addition, the whole assortment provides good impact resistance and bonding strength, even on LSE substrates.



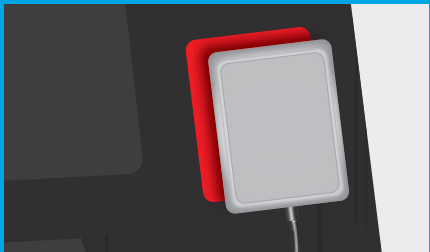
Application examples



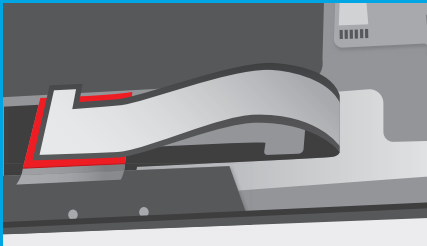
Battery mounting in mobile devices



Mounting of high-value or critical components



Removable mounting of devices or accessories



Temporary fixation of components



Mounting of valuable components

Main features

Fast and residue-free removal

Best bonding

Impact resistance

LSE performance

Product	Description	Backing	Adhesive	Liner	Thickness			Standard log roll width		Core material/ diameter	Adhesion to steel -Ultimate		Adhesion to PE- Ultimate		Temperature resistance short / long term				Static shear resistance	Removability after 14 days
					µm	mils	Color	mm	in		N/cm	oz/in	N/cm	oz/in	°C short-term	°C long-term	°F short-term	°F long-term	23°C / 73°F	
tesa® 70415 Bond & Detach®	Double-sided mounting tape with 46% bio-based adhesive components that can be removed by stretching adhesive; very high bonding strength, push out and shock resistance.	none	Synthetic rubber	Glassine paper	150	5.9	○	610	24.0	PE / 3"	13	118.8	8	73.1	90	60	194	140	●●	●●
tesa® 70425 Bond & Detach®	Double-sided mounting tape with 46% bio-based adhesive components that can be removed by stretching adhesive; very high bonding strength, push out and shock resistance.	none	Synthetic rubber	Glassine paper	250	9.9	○	610	24.0	PE / 3"	16	146.2	9	82.2	90	60	194	140	●●	●●
tesa® 70465 Bond & Detach®	Double-sided mounting tape with 46% bio-based adhesive components that can be removed by stretching adhesive; very high bonding strength, push out and shock resistance.	none	Synthetic rubber	Glassine paper	650	25.6	○	610	24.0	PE / 3"	25	228.4	12	109.6	90	60	194	140	●●	●●
tesa® 70499 Bond & Detach®	Double-sided mounting tape with 46% bio-based adhesive components that can be removed by stretching adhesive; very high bonding strength, push out and shock resistance.	none	Synthetic rubber	Glassine paper	1000	39.4	○	610	24.0	PE / 3"	29	265	19	173.6	90	60	194	140	●●	●●

●● very good ● good ○ discrete - poor



Masking &
surface protection


Industrial paint jobs & surface protection tapes

Masking tapes are essential for a variety of industrial painting applications, even at very high temperatures, while surface protection tapes protect sensitive surfaces from scratches. They must be easy to use and removable without residue, both indoors and outdoors.


- The most common industrial application fields for masking tapes are the following:
- Wet coating/spray painting
 - Powder coating
 - Sandblasting
 - Galvanizing
 - Surface protection

Our tapes with a paper or film backing have a low elongation and are therefore perfect when straight paint edges are required, for example for two-tone applications. Due to their good quick-stick properties, the paper masking tapes can also be used to securely fix masks that protect surrounding areas against overspray.


Main features




Reworkable




Con-formable




Tear resistance
(film backing)




Hand-tearable
(paper backing)




No scratches



Residue free




Environmental
resistance




UV
resistance











Temperature
resistance

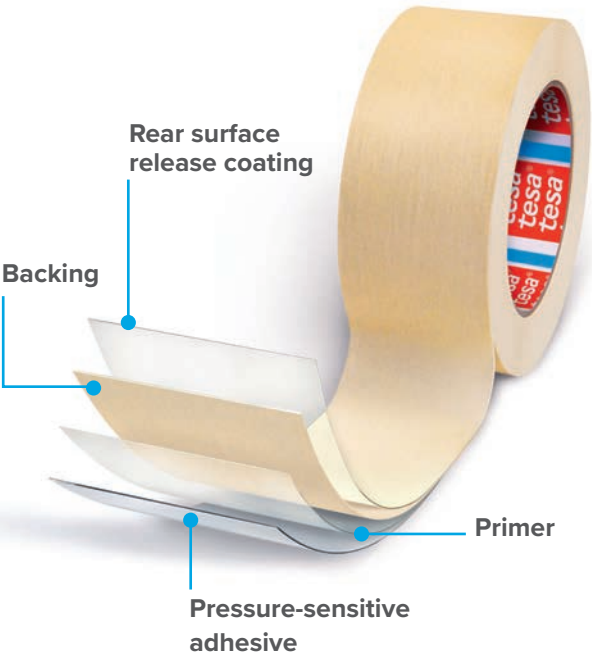


Chemical
resistance

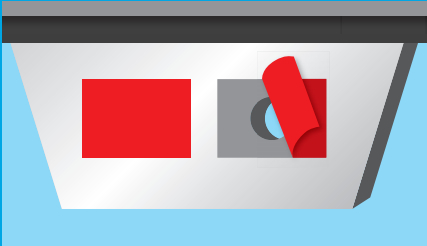


Con-formable

				Thickness		
Product		Description	Backing	Adhesive	µm	mils
Paper Masking						
tesa® 4309		Temperature-resistant masking tape with brown backing for visibility; suitable for spray painting and oven drying up to 120 °C / 248 °F.	Slightly creped paper	Natural rubber	170	6.7
tesa® 4316		Thin and conformable masking tape for painting applications; resistant to wet sanding and suitable for various paints and fillers.	Finely creped paper	Natural rubber	140	5.5
tesa® 4317		Thin and flexible masking tape to lower tempeature painting applications; resistant to wet sanding and excellent adhesion to multiple surfaces.	Slightly creped paper	Natural rubber	140	5.5
tesa® 4325		General purpose masking tape; suitable for indoor applications.	Creped paper	Natural rubber	120	4.7
tesa® 4334		Premium Washi tape for precise and flat paint edges; suitable with water- and solvent-based paints and outdoor masking applications up to 8 weeks.	Washi paper	Acrylic	90	3.5
tesa® 4338		Highly visible, green masking tape; suitable for demanding applications in marine, truck, train, etc. sectors including outdoor usability up to seven days.	Slightly creped paper	Natural rubber	145	5.7
tesa® 4341		Strong, temperature-resistant masking tape; very flexible and suitable for sensitive surfaces.	Slightly creped paper	Natural rubber	190	7.5
tesa® 4342		Washi tape for precise and flat paint edges; suitable with water- and solvent-based paints and outdoor masking applications up to 3 weeks.	Washi paper	Acrylic	85	3.3



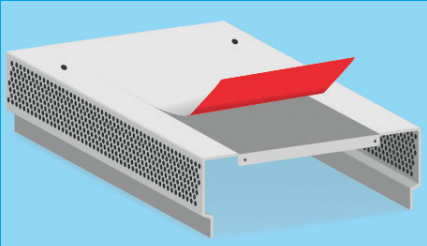
Application examples



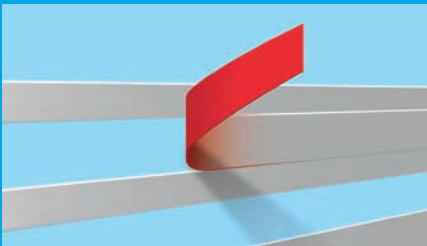
General masking



Sandblasting



Powder coating



Straight-line masking



Surface protection in appliances



Surface protection in automotive

Industrial paint jobs & surface protection tapes























Masking tapes are essential for a variety of industrial painting applications, even at very high temperatures, while surface protection tapes protect sensitive surfaces from scratches. They must be easy to use and removable without residue, both indoors and outdoors.

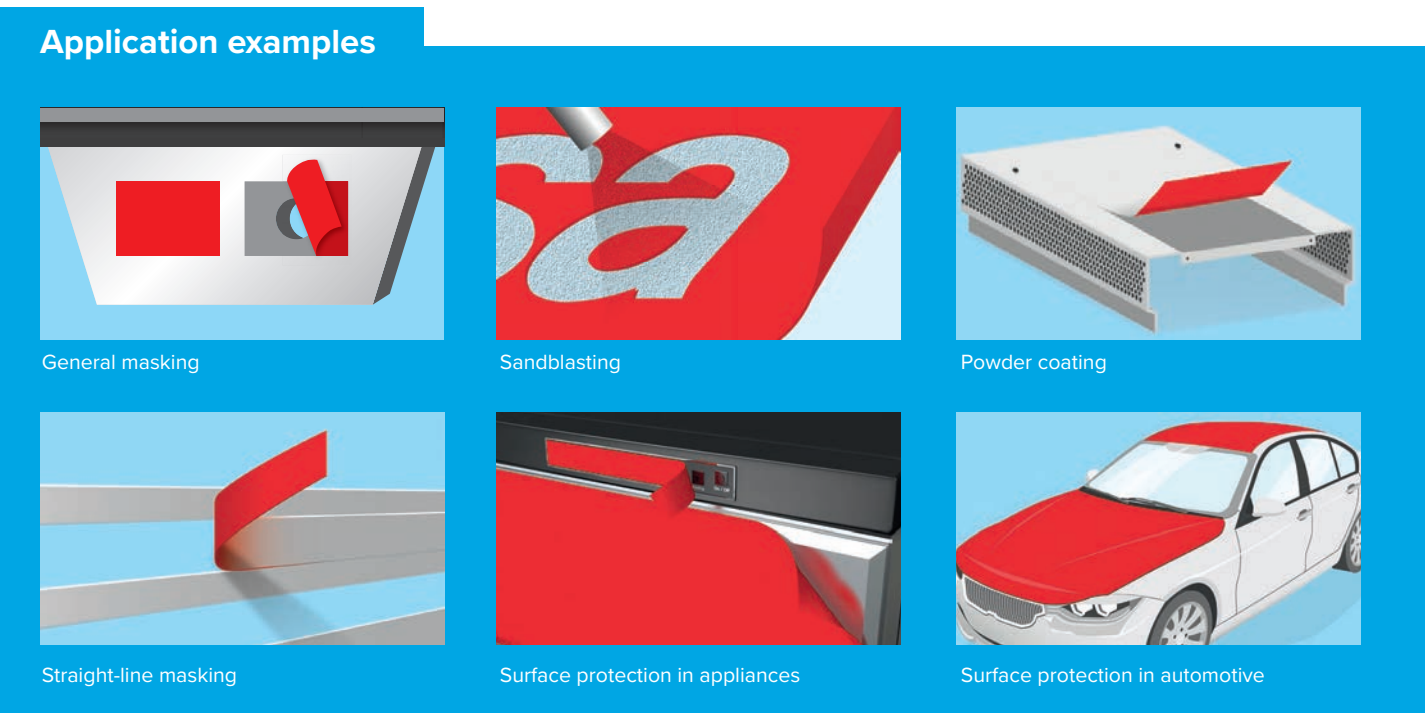
The most common industrial application fields for masking tapes are the following:

- Wet coating/spray painting
 - Powder coating
 - Galvanizing
- Sandblasting
 - Surface protection

Main features



Product	Description	Backing	Adhesive	Thickness		Color	Standard log roll width		Core Material/Diameter	Adhesion to steel		Temperature resistance		Tensile strength		
				µm	mils		mm	in		N/cm	oz/in	°C	°F	N/cm	lbs/in	
Design Masking																
tesa® 4174		Flexible and conformable temperature-resistant PVC masking tape; suitable for painted and non-painted substrates that require sharp and flat paint edges.	PVC	Natural rubber	110	4.3		1270	50.0	PE / 3"	3.7	33.8	150	302	25	14.3
tesa® 4244 PV0		Flexible and conformable temperature-resistant PVC masking tape; suitable for multidimensional surfaces and targets mid-temperature masking applications.	PVC	Natural rubber	110	4.3		1270	50.0	PE / 3"	3.7	33.8	140	284	27	15.4
tesa® 4244 PV2		Flexible and conformable temperature-resistant PVC masking tape; a higher coating weight ensures a secure bond to rough-textured and uneven surfaces.	PVC	Natural rubber	137	5.4		1050	41.3	PE / 3"	4.2	38.4	140	284	36	20.6
Powder Coating																
tesa® 50600		High-temperature PET masking tape used for masking during powder-coating processes or bonding and splicing applications of non-polar materials.	PETP	Silicone	80	3.2		1280	50.4	PE / 3"	4	36.5	220	428	75	42.8
tesa® 50650		Conformable high-temperature PET masking tape used for masking during powder-coating processes, surface protection applications and bonding of non-polar materials.	PETP	Silicone	55	2.2		1280	50.4	PE / 3"	3.3	30.1	220	428	50	28.6
tesa® 61126		Premium high-temperature resistance PET tape used for power-coating, galvanizing and autoclave bonding operations during composite production or wave soldering processes.	PETP	Silicone	125	4.9		980	38.6	PE / 3"	4.3	39.3	220	428	60	34.3
Surface Protection																
tesa® 4848 PV0		Translucent red, environmentally-friendly surface protection tape for protection of sensitive surfaces, i.e. glass, plastic, aluminum.	PE	Acrylic	48	1.9		1000	39.4	Paper / 3"	1.9	17.4	4 weeks outdoor resistance			
tesa® 4848 PV1		Transparent, environmentally-friendly surface protection tape for protection of sensitive surfaces, i.e. glass, plastic, aluminum.	PE	Acrylic	48	1.9		1000	39.4	Paper / 3"	0.8	7.3	4 weeks outdoor resistance			
tesa® 50535		Economy grade surface protection for freshly painted surfaces; suitable for 12 months outdoor exposure.	Polyolefin	EVA	59	2.3		1400	55.1	Paper / 3"	4.3	39.3	12 months outdoor			
tesa® 51136 PV0		PE tape featuring good adhesion and traceless removal; used for masking large areas of interior plastic parts and textiles mainly in transportation industries.	PE	Acrylic	105	4.1		1450	57.1	Paper / 3"	2.4	21.9	Interior applications			
tesa® 58353		A black, single-sided PET tape specifically designed for wrapping and electrical insulation of battery cells and other components of electric vehicles.	PETP	Modified acrylic	85	3.3		1372	54.0	PE / 3"	6	54.8			74	42.3





Customer Solution Center

Technical customer service is our top priority

We offer you a wide range of products supporting you in all of your business fields. Many options often require a closer look into the specific application. At the Customer Solution Center we can support you by taking into account your specific materials, their application process, and the operating conditions for the product in use.

From a range of several hundred adhesive tape solutions, we select the right product for your customers' application while considering their specific requirements.

In our Customer Solution Centers we analyze customers' materials, in combination with our adhesive tape products, depending on the application-specific demands, such as bonding power, shock absorption, resistance to environmental impacts, removability, and much more.

During on-site visits, we assist you in detecting such requirements and translate those into appropriate test programs.

Not only do we recommend the suitable products, we also support the implementation stage of our solutions into your customers' process with application tools and equipment.

Based on our modular training program, we individually teach you and your customers about the adhesive tape technology, along with our products, their applications, and corresponding tools. This can either be done at our technical training facilities or even as on-site training on your premises.

Our global network of application engineers collaborate closely to provide short response times and close customer contact, offering you many years of experience and expertise in adhesive tape products and applications.

Our Sales team will assist you in directing your inquiries to our Customer Solution Centers.

Partners beyond tape



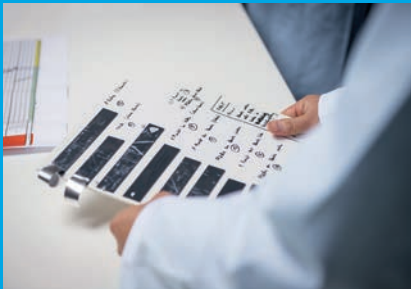
Product excellence

Access to the broadest tesa product portfolio, including a selection of 60+ products handpicked for our Converter Partners, on which we guarantee quick sampling in different formats (mini-log, A4 sheets) and minimum order quantity of one log roll on most standard orders.



Expert support

Our Sales personnel and Converter Experts are there to assist you with any customer request. Technical experts at tesa Customer Solution Center also offer on-site and remote support and evaluation of your individual application under laboratory conditions.



Testing & benchmarking

Technical consultants will support you on-site and remotely from our labs, resorting to state-of-the-art equipment to perform:

- Comparative tests with competitor products
- Customized tests with customer substrates
- Simulations under a wide range of environmental conditions



Our management system is certified according to the standards ISO 9001, IATF 16949, and ISO 14001.



United States and Canada
tesa tape, inc.
5825 Carnegie Boulevard
Charlotte, NC 28209
Phone: +1-800-426-2181
Email: customercare@tesatape.com

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.