



HIGHLIGHT EFFICIENCY

High Quality Adhesive Tape Solutions for Solar Panel Production

APPLICATION SOLUTIONS FOR EFFICIENT PANEL MANUFACTURING

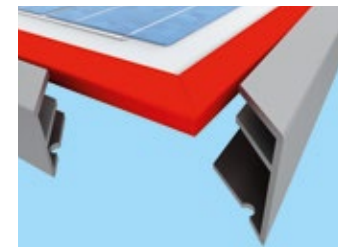


We are dedicated to the solar industry

Over the past years we have built an in depth understanding of tape applications in module assembly. This is why we are able to offer individual solutions consisting of quality products, technical advice and application systems. As a result you get a reliable bonding quality and efficient, easy-to-implement processes.

Benefits from a partnership with tesa

- Experienced solar team
- Global presence and supply
- Industry proven product range
- Application solution packages

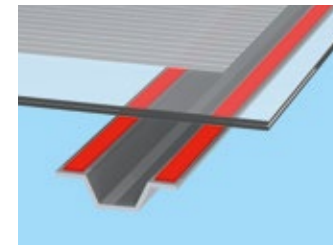


Solar frame bonding

Tape is a trusted method for solar frame bonding. It enables an esthetic finish, design flexibility and a fast, clean assembly process. Choose tesa for our experience and benefit from a proven solution.

tesa® 62508, 62510, 62512 FrameSelect

- High quality double-sided PE foam tape
- A modular assortment allows for optimal solutions
- External proof of performance: UL, TÜV test reports



Back rail bonding

Reliable, permanent bonding solution for back rails. No curing time needed, higher assembly speed.

tesa® ACXplus 7078 – Acrylic foam tape

- High bonding strength
- Stress dissipating core
- High temperature and weathering resistance



Cable fixation

To secure photovoltaic cables during shipment and installation.

tesa® 64284 – Strapping tape

- Easy and clean removal
- Very good adhesion to many substrates
- Tear resistant backing

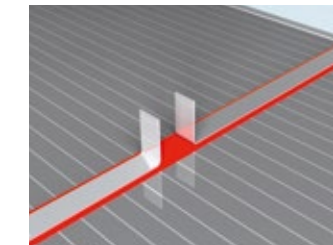


Junction box fixation

Secure fixation during the box mounting process with liquid adhesives. Makes the process faster and safer.

tesa® 62510 – Double-sided foam tape

- High adhesion to many back sheet materials

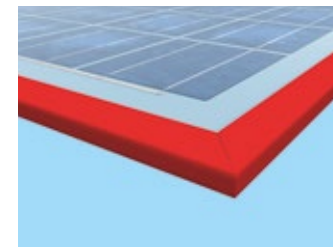


Bus bar mounting

Optimized bus bar mounting and insulation for manual and automated processes.

tesa® 4983 – Double-sided PET tape

- Ultrathin design
- High dielectric strength
- High temperature resistance

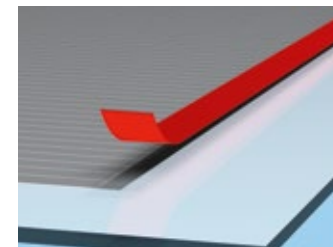


Permanent edge protection

Gives frameless modules an esthetic finish and reduces the module break rate.

tesa® 65052 – Black edge protection tape

- Shock absorbing
- Durable and weathering resistant
- Easy to apply

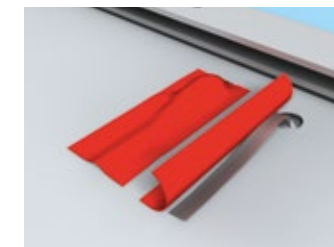


Ribbon black out

Covers visible charge collectors or bus bars improving the solar module design.

tesa® 7250 – Black single-sided PET tape

- Excellent light blocking
- High dielectric strength
- Temperature and ageing resistant

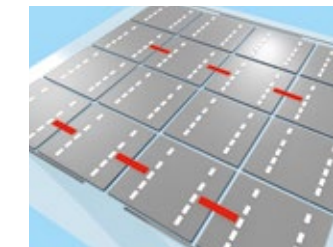


Hole covering

Used to temporarily cover holes and slits in the back sheet and hold ribbons down during lamination.

tesa® 50600 – High temperature masking

- 220° C temperature resistance
- Excellent removability after lamination



Cell fixation and alignment

To hold stringed solar cells in place during the lamination process.

tesa® 4129 – Single-sided PET tape

- Thin and transparent
- Ageing and UV resistant
- High temperature resistance

Engineered application tools for industrial use

Our solutions go beyond tape. We provide technical consulting and proven application tools, in order to implement a fast and reliable production process at our customers. Our application systems are easy to use and enable constant quality. We are scaling them depending on production output and complexity. Benefit from an individual and cost-efficient solution.



tesa® Edge Taper LR

Handheld applicator to apply tape to the module edge from pancake roll or spool.

- Fast, easy-to-use and proven tool
- Allows for precise taping
- Liner removal function



tesa® 6095 Spool Dispenser

Motor driven dispenser for unwinding and feeding long length tape spools.

- Less roll changes with less waste
- Low investment cost
- Easy to integrate into existing production layout



Spooled products

Our spooled tapes in long length and superior slitting quality enable an efficient framing process.

- For mass production
- Designed to run in leading automated framing units



Technical product information

Product	Backing	Adhesive type	Color	Liner	Thickness [μm]	Temperature resistance long/short [°C]	Ultimate adhesion to steel [N/cm]	UL file number
Double-sided adhesive tapes								
tesa® 62508	PE foam (closed cell)	Tackified acrylic	Black/white	Filmic/paper	800	85/85 ²⁾	> 13,5 ¹⁾	QIHE2.E334507
tesa® 62510	PE foam (closed cell)	Tackified acrylic	Black/white	Filmic/paper	1,000	85/85 ²⁾	> 13,5 ¹⁾	QIHE2.E334507
tesa® 62512	PE foam (closed cell)	Tackified acrylic	Black/white	Filmic/paper	1,200	85/85 ²⁾	> 13,5 ¹⁾	QIHE2.E334507
tesa® ACX ^{plus} 7076	Foamed acrylic	Pure acrylic	Black	Filmic/paper	1,500	120/200	> 35,0 ¹⁾	QOQW2.E309290
tesa® ACX ^{plus} 7078	Foamed acrylic	Pure acrylic	Black	Filmic/paper	2,000	120/200	> 40,0 ¹⁾	QOQW2.E309290
tesa® 4983	PET film	Tackified acrylic	Transparent	Filmic	30	120/200	7,6	PGGU2.MH18055
Single-sided adhesive tapes								
tesa® 65052	Ionomer film/PE foam	Tackified acrylic	Black	Filmic	620	85/85 ²⁾	> 9,0 ¹⁾	-
tesa® 64284	MOPP	Natural rubber	Blue	-	110	100 ²⁾	4,0	-
tesa® 7250	PET film	Tackified acrylic	Black	-	50	120/200	5,3	OANZ2.E203787
tesa® 50600	PET film	Silicone	Green translucent	-	80	100 ³⁾	4,0	-
tesa® 4129	PET film	Pure acrylic	Transparent	-	50	130 ^{4)/200 ³⁾}	2,3	OANZ2.E203787

¹⁾ Failure mode: Foam splitting

²⁾ Based on comparative adhesion test after damp heat storage (IEC 61215)

³⁾ Residue free removal after short term temperature exposure

⁴⁾ Long term operating temperature according to UL test method



tesa® 62508, 62510, 62512 – TÜV Rheinland

- Adhesive strength after IEC 61215 climate (Report no. 21217921-001)
- Adhesive strength after salt mist climate: (Report no. 21217921-002)
- Adhesive strength after damp heat 2000h (Report no. 21217921-003)



tesa® ACX^{plus} 7078 – MPA Stuttgart

- Dynamic strength after storage in detergent (Report no. 52140-902-17240)



See file numbers above.

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.