



# High Performance Pressure-Sensitive Adhesives for Foam and Fiber Lamination

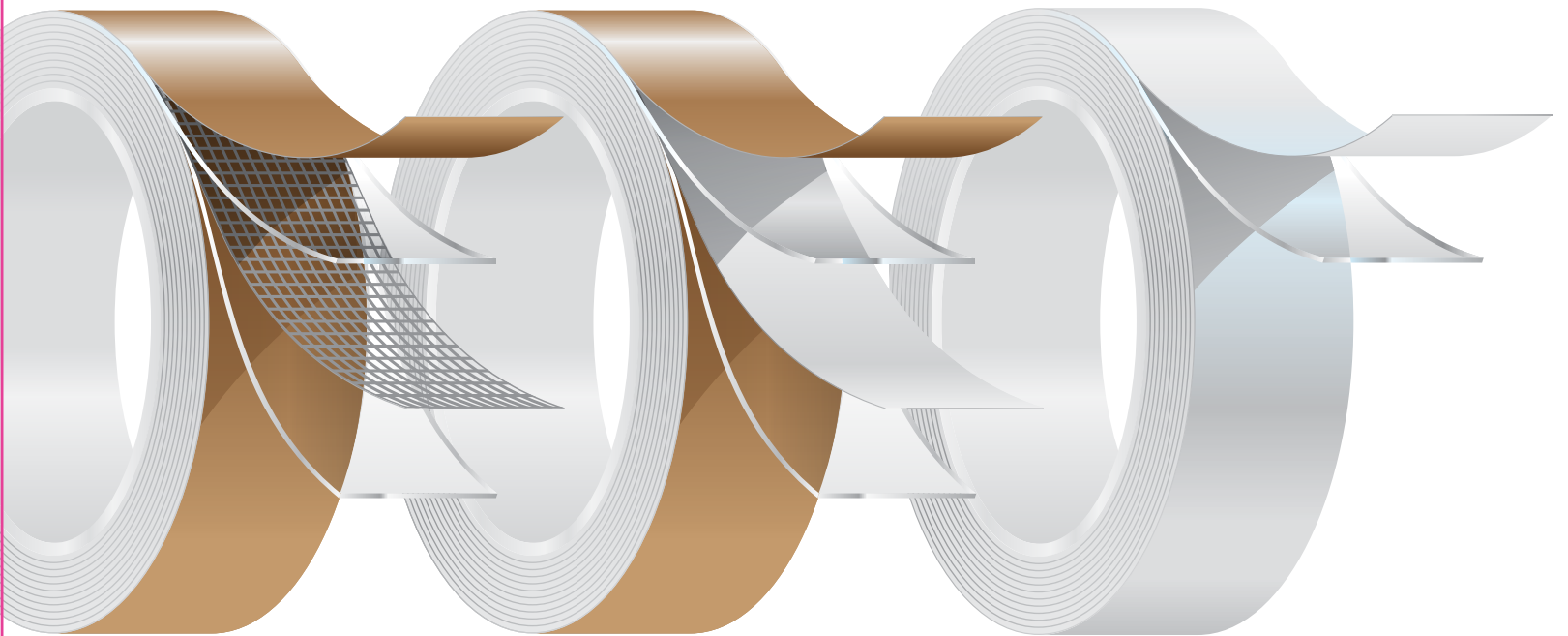
Automotive | Transportation | Heavy Equipment | Building and Construction | Appliances

- > Acrylic, modified acrylic and rubber based
- > Continuous operating temperatures from -40°C/ -40°F up to 140°C/ 284°F
- > Adhesion to low, medium and high surface energy substrates
- > Excellent price performance ratio



Working with fabricators and converters Avery Dennison Performance Tapes provides a full range of pressure-sensitive adhesive products used in many fabrication and assembly applications of sub-components and finished parts. Foam bonding adhesive tapes are an important component in any application using self-adhesive foam products.

Avery Dennison Performance Tapes has one of the most complete adhesive technology ranges in the foam and fiber market, offering both technical and economical solutions. Thanks to our extensive adhesives and product constructions portfolio, we are able to offer the most suitable pressure-sensitive adhesive solutions for a wide range of applications and customer challenges.



# Intelligent Solutions

## FOAM AND FIBER BONDING ADHESIVE TAPES – PORTFOLIO

Foam bonding tapes differ in terms of physical characteristics and thermal properties. The basic adhesive performance properties for foam bonding tapes include initial adhesion, peel strength or adhesion, tensile or break strength and temperature resistance. The selection of the correct adhesive family for success in a specific application can be critical.

Avery Dennison Performance Tapes products for foam and fiber bonding are based on a comprehensive range of pressure-sensitive adhesive technologies.

- > **Hot Melt Rubber:** Most economical adhesive type. Performance characteristics include high initial tack, fast wet out for a high quick stick adhesive and excellent adhesion to Low Surface Energy (LSE) materials. Minimal moisture and water resistance. Our special formulated elastomeric rubber based adhesive offers temperature resistance up to +100°C/ 212°F.
- > **Solvent Rubber:** All of the performance characteristics of a hot melt rubber adhesive with added moisture and water resistance performance. Temperature resistance up to +115°C/ 239°F.
- > **Solvent Pure Acrylic:** High durability with excellent resistance to UV, heat, chemicals, fuel, solvent, moisture, water and plasticizers. Temperature resistance up to +140°C/ 284°F.
- > **Solvent Modified Acrylic:** Additives improve initial tack and adhesion over pure solvent acrylics which help to enhance performance for overall foam bonding and adhesion to Low Surface Energy (LSE) materials. Other performance benefits include plasticizer resistance, solvent, chemical, UV, moisture and water resistance. These high cohesion modified acrylic adhesives are especially designed for LSE substrates and medium to high end foam and fiber bonding applications, including noise and vibration management in automotive, appliances, building and construction.
- > **Emulsion Modified Acrylic:** A versatile and solvent free modified acrylic adhesive exhibits great wetting performance on a variety of foams and fibers. Allows easy conversion on foams while providing sufficient cohesive strength to meet industry requirements for automotive interior applications. A good balance of technical performance combined with economical solutions.
- > **UV Cured Pure Acrylic:** An environmentally friendly adhesive provides low fogging and VOC performance in automotive interior applications. Excellent bonding to PU ether foam grades with good plasticizer resistance.

# Intelligent Solutions

## TYPES OF ADHESIVE CARRIERS

Materials are tissue, nonwoven, polypropylene, polyester, polyester scrim, glass fiber scrim and transfer tapes with no carriers. Adhesive carrier functions are many. They include improved conversion (die cutting), substrate reinforcement, migration prevention and conformability. Carriers can provide tensile strength and moisture resistance, improve handling and aid repositioning.

- > **Tissue** — Flexibility with increased adhesive caliper, tears by hand
- > **Nonwoven** — Higher internal strength compared to tissue, water resistant, tears by hand
- > **Filmic** — Polypropylene and polyester
- > **Polyester and Glass Fiber Scrim** — Reinforced substrates (no stretch)

## TYPES OF RELEASE LINERS

Release liners are constructed from various base materials, such as glassine, densified and polyethylene protected Kraft papers along with polyester and polypropylene films. Depending on the application, we use different release liners for our foam and fiber bonding adhesive tapes.

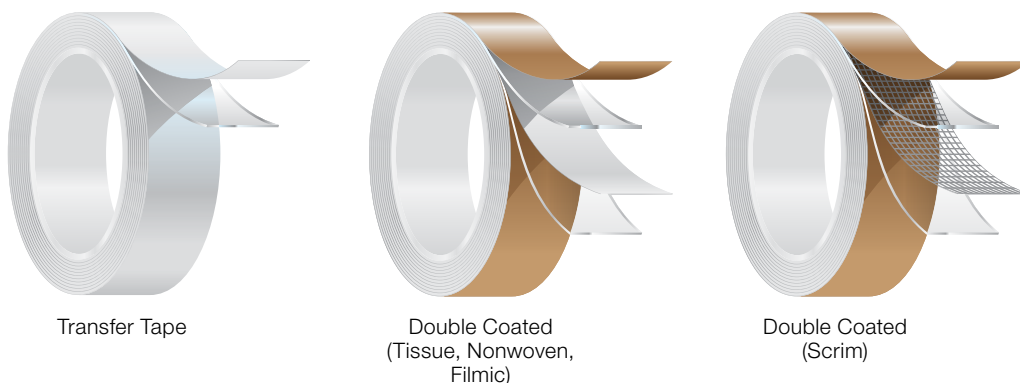
## TAPE CONSTRUCTIONS

### Transfer Tape

A film of unsupported adhesive is coated directly onto a siliconized release liner. The release liner is coated with silicone on both sides to ensure that the tape unwinds easily and can be laminated to various substrates. Offers excellent conformability.

### Double Coated Tissue/ Nonwoven/ Filmic/ Scrim

The adhesive is coated on both sides of a carrier material. This construction is provided on a liner coated on both sides with a silicone release system. Double coated constructions offer improved internal strength, greater dimensional stability and easier conversion.



Transfer Tape

Double Coated  
(Tissue, Nonwoven,  
Filmic)

Double Coated  
(Scrim)

# Automotive



## AUTOMOTIVE FOAM PADS AND FELTS

Tapes are used to bond to a variety of PU, PVC, PE or impregnated foams used as insulation materials for interior vehicle applications in cars and trucks. An average automobile contains numerous components that use foam and fiber materials ranging from a few square millimeters up to several hundred square millimeters. The majority is polyurethane ether and ester open cell foam.

Our specialized adhesives are designed for a wide array of applications of fabrics-to-foam, fabric-to-fabric and other soft materials used in automotive interior assembly. Our bonding and adhesive solutions are used within vehicle seat systems for fixation and installation of seat heating elements, and as temporary mounting aids for fabrics, frame cushion and leather seat coverings.

### Typical Applications:

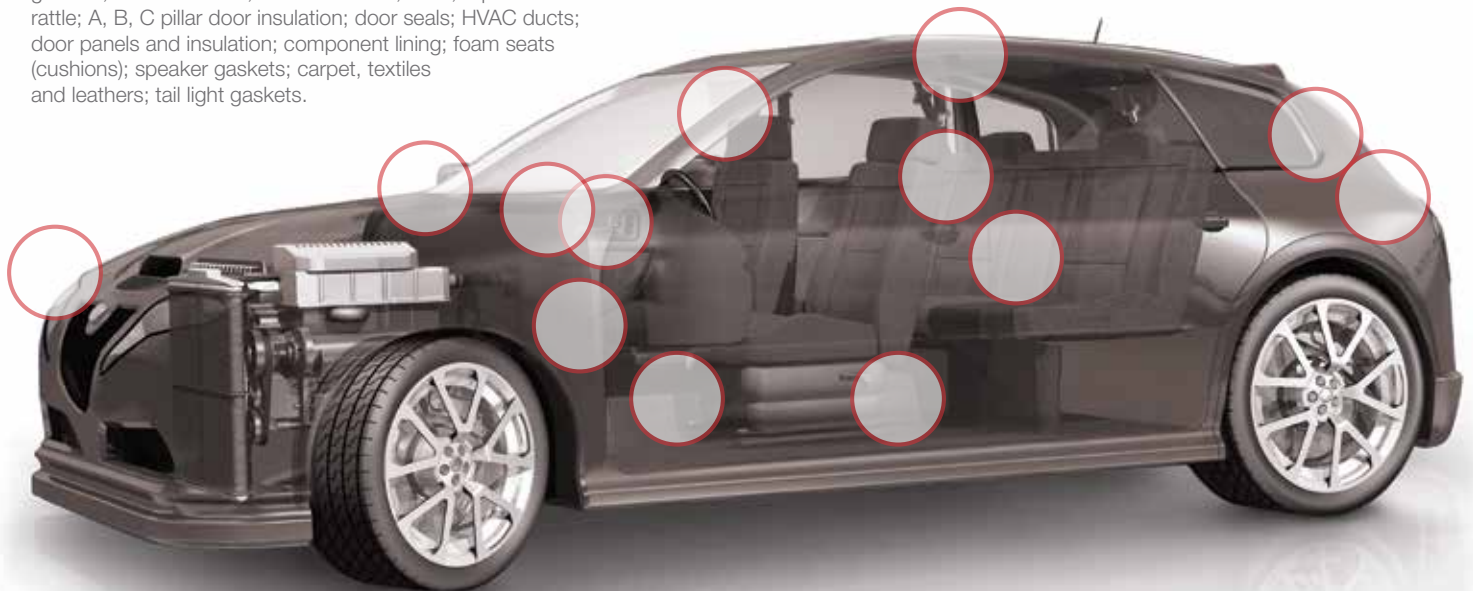
- > Gaskets and seals
- > Sound and vibration damping
- > Noise reduction
- > Seat heating
- > Thermal insulation
- > Headliner insulation
- > Bitumen and EVA pads
- > Car body transport protection pads

### Typical Benefits:

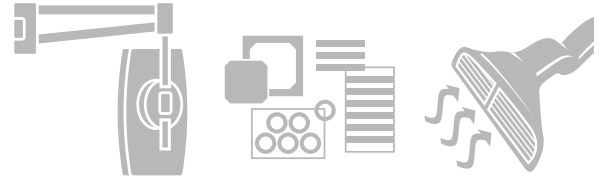
- > Good affinity to wide range of substrates, including Low Surface Energy (LSE) materials
- > Temperature resistance from -40°C/ -40°F up to 140°C/ 284°F
- > Good chemical, grease and solvent resistance when laminated
- > Long term adhesion
- > Low fogging and VOC with UV acrylics
- > Permanent/ removable adhesives
- > Repositionable adhesives
- > Easy to apply, easy liner removal

As a recognized leader in many key automotive areas, we continually develop innovations that meet manufacturers' requirements, optimize production efficiencies and ultimately enhance the consumer driving experience.

**Application areas include:** Underhood noise and vibration damping; head lamp gaskets; headliners; side view mirror gaskets; soft touch trim; dash insulation; buzz, squeak and rattle; A, B, C pillar door insulation; door seals; HVAC ducts; door panels and insulation; component lining; foam seats (cushions); speaker gaskets; carpet, textiles and leathers; tail light gaskets.



# Transportation



## TRANSPORTATION

The transport industry is constantly pushing its parts suppliers to help reduce cost and improve component fabrication; from safer parts to meeting specific environmental needs. An attractive cost performance ratio combined with product selection is important. Pressure-sensitive adhesive tapes are used for a wide variety of applications when foam and fiber materials need to be firmly and reliably affixed.

For more than 40 years Avery Dennison Performance Tapes continues to provide OEMs and part manufacturers with foam and fiber bonding application solutions in the transportation industry.

### Typical Applications:

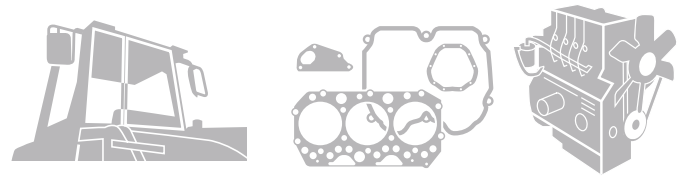
- > Cabin insulation
- > Cabin interior trim
- > Interior and exterior panels
- > Internal door and general cladding
- > Sound and vibration damping
- > Noise reduction
- > Thermal insulation



**Application areas include:** Headliners; mirror gaskets; buzz, squeak and rattle; door and window insulation and seals; HVAC ducts; door panels; foam seats (cushions); carpet, textiles and leathers; panel insulation; head and tail light gaskets.



# Heavy Equipment



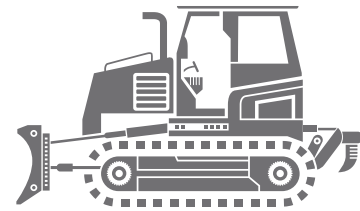
## HEAVY DUTY MACHINERY

A side effect of diesel engines is their noise. Add the sound of tires, wind and the work carried out with the machinery, working conditions created for the driver can be harsh when noise enters the cabins of trucks, earthmoving equipment and forestry vehicles. A foam barrier or firewall used for protection and acoustic absorption helps to significantly reduce the noise level inside the cabin.

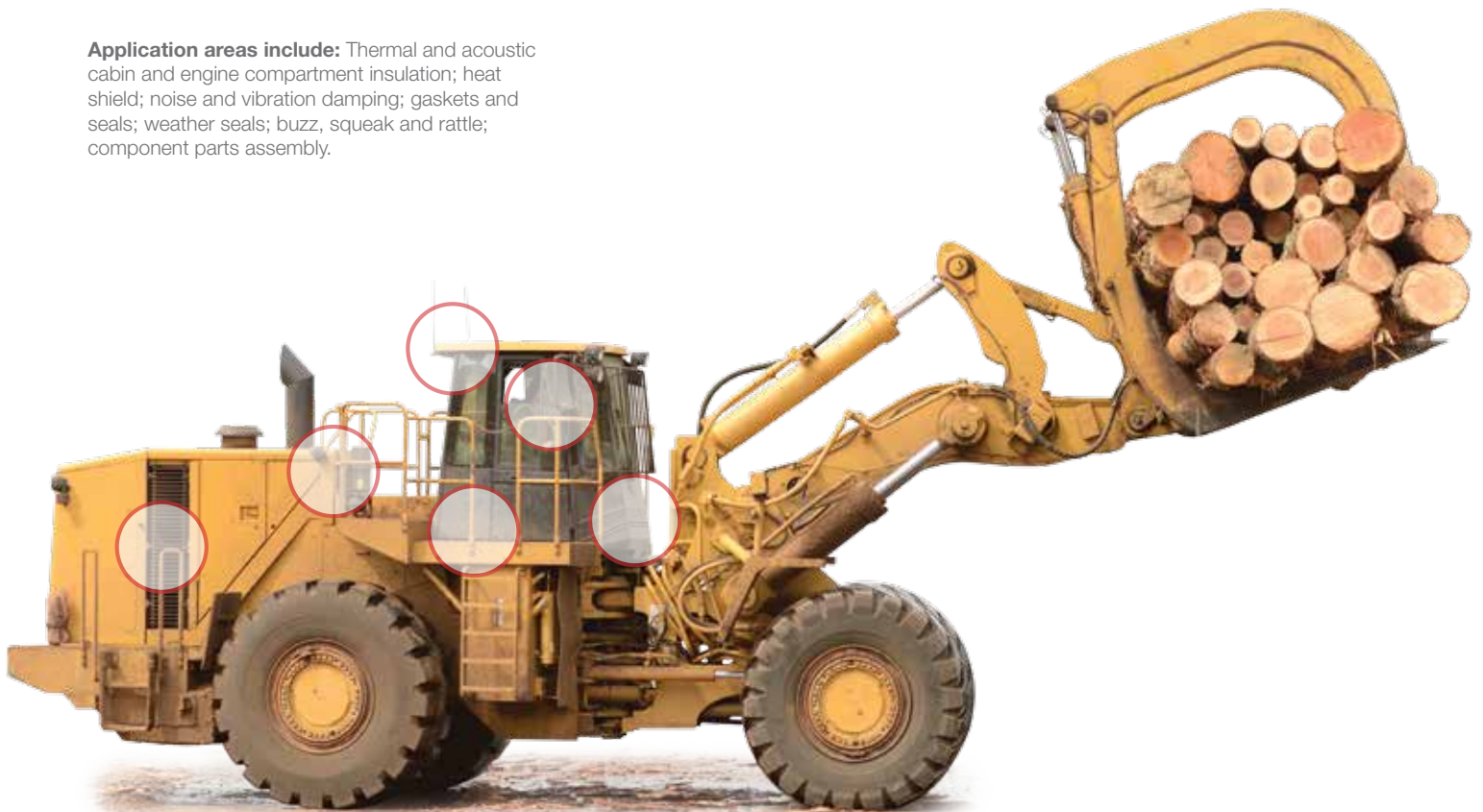
Engineered to bond to a variety of foams used in sound damping components, Avery Dennison Performance Tapes pressure-sensitive adhesives are designed for thermal and acoustic insulation applications in heavy duty machinery. Our foam and fiber bonding tapes are suited for gaskets and seals that help prevent the intrusion of liquids, air sound and gases. Pressure-sensitive adhesive tapes are easy to apply and can provide an alternative solution to drilling holes and openings that create a potential for corrosion.

### Typical Applications:

- > Sound and vibration damping
- > Insulation and noise reduction
- > Gaskets and seals
- > Weather seal
- > Thermal insulation



**Application areas include:** Thermal and acoustic cabin and engine compartment insulation; heat shield; noise and vibration damping; gaskets and seals; weather seals; buzz, squeak and rattle; component parts assembly.



# Building and Construction



## BUILDING AND CONSTRUCTION

### Interior and Exterior Applications

Today's building industry demands materials that are strong, support lightweight installations, perform well and are easy to use. Durability and versatility are also key requirements in this industry where quality and reliability are crucial features for any material used.

By combining different adhesive technologies, carriers and release liners, Avery Dennison Performance Tapes offers a versatile product range to address the ever changing, challenging and demanding application conditions and requirements for building and construction applications.

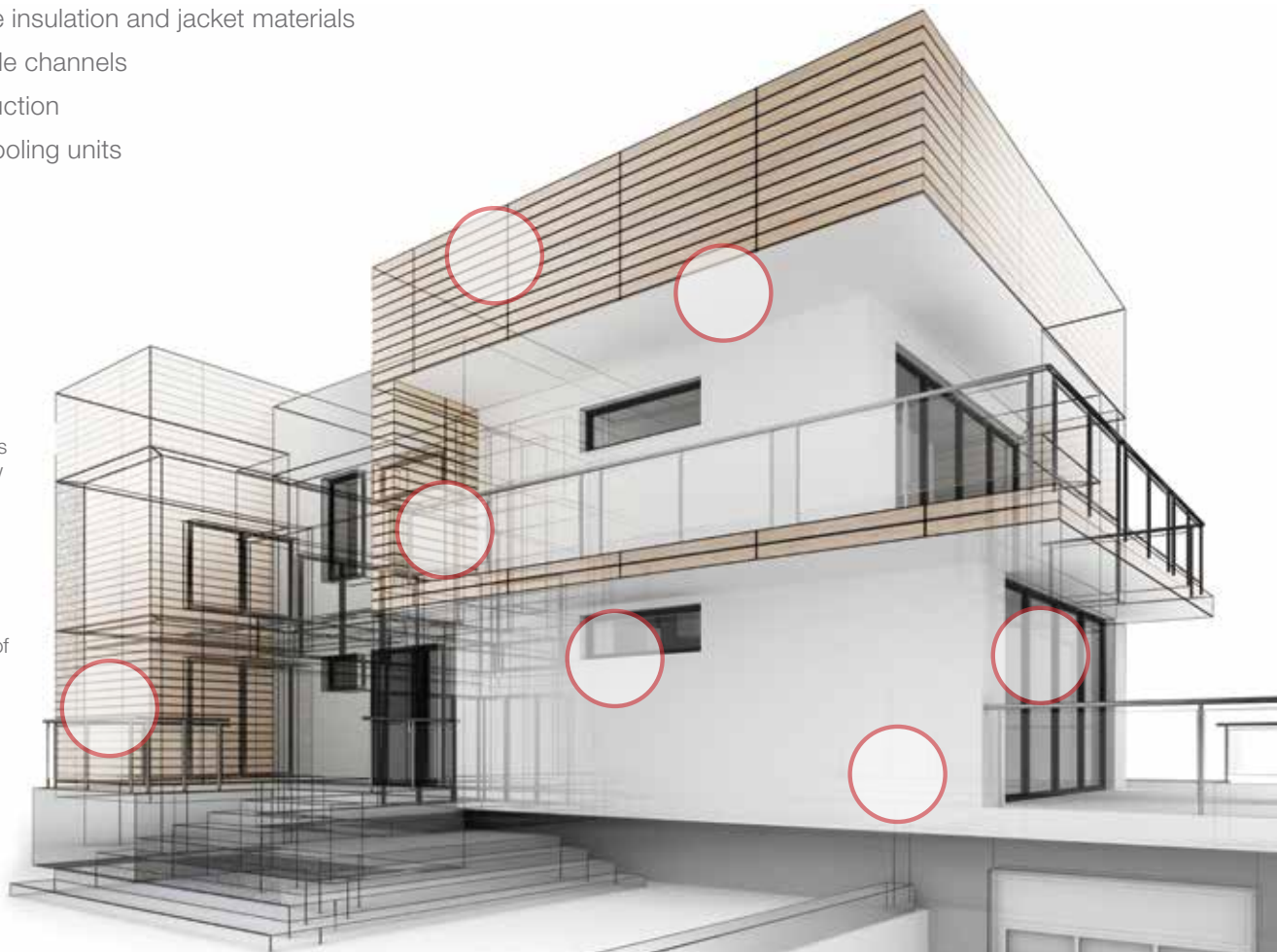
Our pressure-sensitive adhesive tapes for foam and fiber bonding applications offer functional, efficient and sustainable solutions. Our tape solutions are used for a number of applications where water, UV and temperature resistance is needed.

### Typical Applications:

- > Temporary fixation of construction materials
- > Bonding of glazing bars in window frames
- > Building fascias and cladding
- > Decorative mounting
- > Mounting smoke detectors, including commercial
- > Closure of pipe insulation and jacket materials
- > Fixation of cable channels
- > Interior construction
- > Heating and cooling units
- > Weather strips and profiles
- > Fire protection strips
- > Solar panel construction
- > Sound absorption
- > Thermal insulation
- > Vibration damping

### Application areas

**include:** Thermal insulation and sound absorption; heating and cooling units; pipe wrapping; fascias and cladding; window frame and door insulation; weather strips; temporary and permanent fixation of materials; external decorative mounting; mounting of smoke detectors; fire protection strips.





# Appliances



## LARGE DOMESTIC APPLIANCES

We engineer a comprehensive range of foam and fiber bonding solutions for major appliances that help manufacturers, retailers, owners and operators assemble, use and maintain their products correctly. Our solutions are designed to perform through our customers' temperature, moisture, chemical and stress resistance requirements.

Noise, vibration, rattles and squeaks are unwanted making foam and fiber products increasingly used for sound damping, resisting against thermal shock and for insulation. Additionally they are found in applications providing a good barrier against dust, moisture, gas vapor and chemicals.

Our complete portfolio of pressure-sensitive adhesives and tapes is ideal for appliance foam and fiber bonding applications.

### Typical Applications:

- > Noise and vibration damping
- > Gaskets and sealing
- > Installation and assembly of components
- > Nameplates and labels
- > Thermal insulation and heat shield
- > Membrane switches and keyboards
- > Installation of display panels
- > Assembly of components with low surface energy
- > Attachments for brand embellishments and emblems
- > Installation of evaporator plates to refrigerators

**Application areas include:**  
General assembly  
component attachment;  
nameplates;  
overlays; labels;  
component insulation; heat shield; moisture barrier and seals; gaskets; panel and door insulation; display panel assembly.



# High performance pressure-sensitive adhesives for foam and fiber lamination

Avery Dennison Performance Tapes offers one of the most comprehensive adhesive technology ranges of high performance pressure-sensitive adhesives and tapes. Our solutions portfolio covers a wide range of foam and fiber lamination applications for a variety of industry segments.

## **Automotive | Transportation | Heavy Equipment | Building and Construction | Appliances**

- > Acrylic, modified acrylic and rubber based
- > Continuous operating temperatures from -40°C/ -40°F up to 140°C/ 284°F
- > Adhesion to low, medium and high surface energy substrates
- > Excellent price performance ratio

Thanks to our extensive range of adhesives and constructions we are able to offer the most suitable technical and economical pressure-sensitive foam and fiber bonding solutions to address our customers' application challenges. We use our experience to innovate and create cost-effective, high quality products. We have state-of-the-art labs to test and develop the solution that's right for you.

Avery Dennison Performance Tapes is an on-site applications provider. Our skilled teams of application technical service engineers, sales and customer service are here to address your application challenges.

# Avery Dennison

## ABOUT AVERY DENNISON

Avery Dennison (NYSE:AVY) is a global leader in labeling and packaging materials and solutions. The company's applications and technologies are an integral part of products used in every major market and industry. With operations in more than 50 countries and 26,000 employees worldwide, Avery Dennison serves customers with insights and innovations that help make brands more inspiring and the world more intelligent. Learn more at [www.averydennison.com](http://www.averydennison.com).

## ABOUT AVERY DENNISON PERFORMANCE TAPES

Avery Dennison Performance Tapes is a world-class operation focused on developing and manufacturing high performance pressure-sensitive adhesives and tapes for a broad range of applications in automotive, appliances, electronics, building and construction, specialty industrial and personal care markets. The organization has over 40 years of experience supplying standard and customized pressure-sensitive materials designed to deliver innovative solutions for customers' needs across the globe. Worldwide manufacturing facilities ensure a global presence supported by local sales, technical and customer service throughout the regions. Learn more at [www.tapes.averydennison.com](http://www.tapes.averydennison.com).

Please refer to [Tapes.AveryDennison.com](http://Tapes.AveryDennison.com) for complete terms and conditions, including warranty terms, relating to this product. You should periodically review the site as terms and conditions are subject to change without notice.

© 2015 Avery Dennison Corporation. All rights reserved. Avery Dennison® is a registered trademark of Avery Dennison Corporation. All other Avery Dennison brands, product names, antenna designs and codes or service programs are trademarks of Avery Dennison Corporation.

ADV# AD 0133, 2/15, 500. Printed in U.S.A.



Performance  
Tapes

**Asia Pacific**  
Kunshan, China,  
NO. 618 Nanhe Road  
Kunshan Economic &  
Technological Zone  
China 215335  
Phone: +86 512 57155001  
Fax: +86 512 57155059

**Europe**  
Tieblokkenlaan 1  
B-2300 Turnhout  
Belgium  
Phone: +32 (0)14 40 48 11  
Fax: +32 (0)14 40 48 55

**South America**  
Rua Francisco Foga, 225  
13280-000 Vinhedo  
SP Brazil  
Phone: +55 19 3876 7656  
Fax: +55 19 3876 7617

**North America**  
250 Chester Street  
Painesville, Ohio  
44077 USA  
Phone: +1 866-462-8379  
Fax: +1 888-358-4469

For more information on our bonding tapes and adhesive solutions, visit [Tapes.AveryDennison.com](http://Tapes.AveryDennison.com)