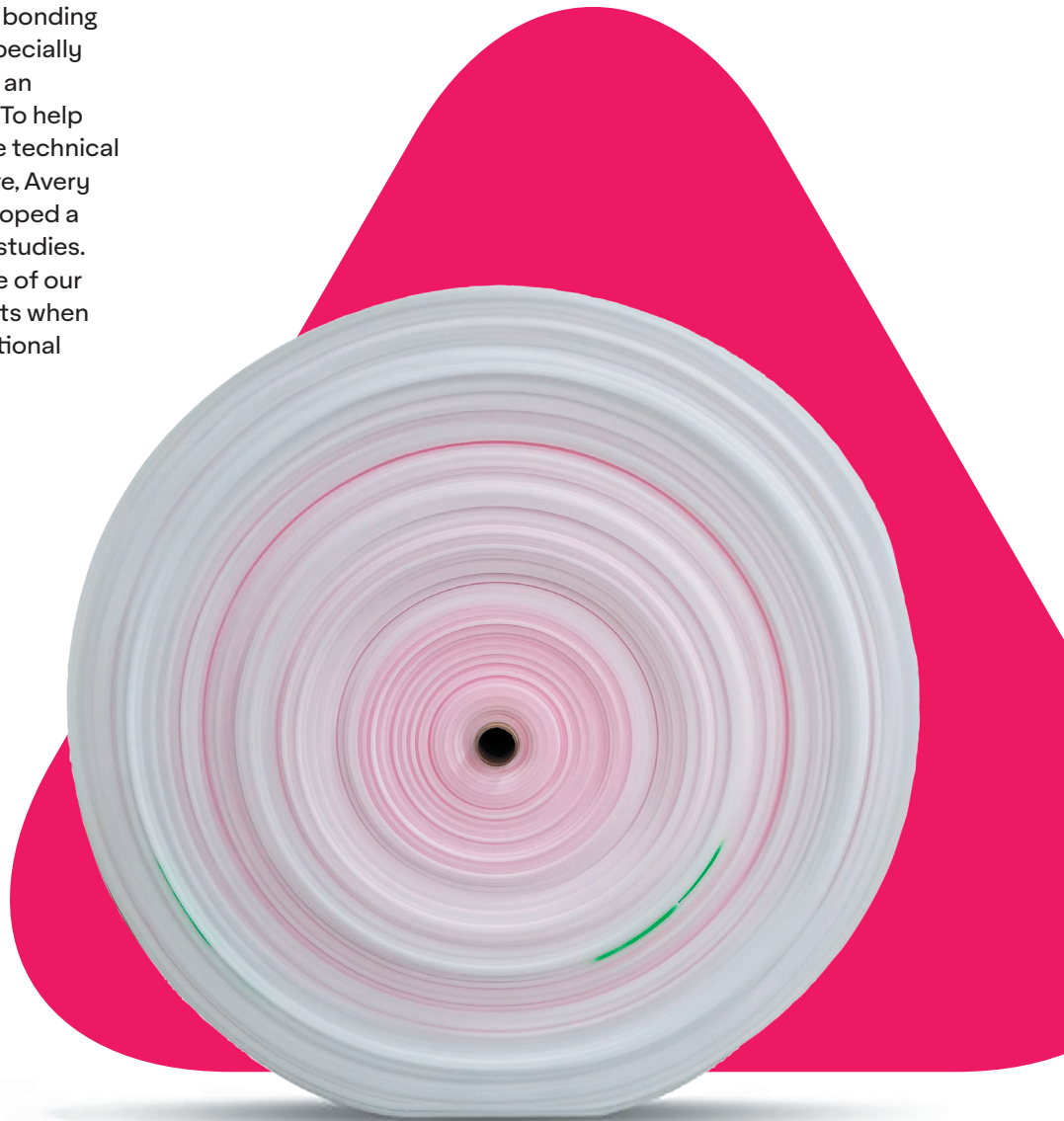


Avery Dennison Performance Tapes

Bonding Study: Woodbridge AutoBond™ Flexible Foams

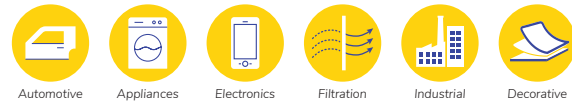
Determining the correct adhesive when bonding to foam and felt may be challenging, especially when seeking to provide your customer an accurate quote quickly and accurately. To help you with the adhesive selection, and the technical requirements your customer may require, Avery Dennison Performance Tapes has developed a series of adhesive technology bonding studies. These studies highlight the performance of our Core Series™ Portfolio adhesive products when combined with foams and felts from national manufacturers.



Bonding to Woodbridge AutoBond Flexible Foams

The Woodbridge AutoBond™ family of trim foams can be used in a variety of processes and applications. The product line of foams is designed to meet the most rigorous OEM durability specifications while still providing superior value to the company's customers. Woodbridge AutoBond flexible foam products are manufactured using a continuous-pour method. Combined with Woodbridge's chemical expertise and comprehensive process controls, Woodbridge offers consistent and high-quality foam properties for use in the marketplace.

AutoBond flexible foams, designed to meet most OEM automotive interiors specifications and requirements, are available in flat and round blocks, and in polyether and polyester foam grades. AutoBond is used in the following auto applications: seating systems, interior systems, acoustics and overhead systems.



Woodbridge AutoBond and Avery Dennison Adhesive Sample Preparation

Avery Dennison adhesive products were backed with a 2 mil PET film and trimmed to a one-inch width. Two sample sets were laminated to Woodbridge AutoBond foams.

Set	Description
1	Laminated at room temperature. 30% compression, 20 psi, 20 fpm, 72 hr recovery after lamination.
2	Laminated at 220° F, 30% compression, 20 psi, 20 fpm, 72 hr recovery at room temperature after lamination.

Woodbridge AutoBond and Avery Dennison Adhesive Sample Testing

Foam bonding is affected by the foam's base polymer, thickness, and cell type. Adhesion to foam is impacted by factors such as: adhesive mass, pressure, compression, lamination speed and temperature. The five foams were tested at 180° Peel Adhesion at 12 in/min. It was determined by this study that heat lamination is beneficial.

Woodbridge AutoBond Materials	Avery Dennison Adhesive Families	Avery Dennison Product Numbers	Performance with Woodbridge AutoBond Materials
	● General Purpose Rubber	FBR 1950 FBR 8950	Good
	● Differential: General Purpose Rubber / High Shear Rubber	FT 8327	Good
	● High Shear General Purpose Rubber	FT 8345	Good
• AB14-180	● High Performance Acrylic (HPA™)	HPA 1902 HPA 1905	Better Better
• AB40-250			
• AB40-170	● General Purpose Acrylic	FT 1123 FT 1126	Better Best
• GC160-320	● High Performance Low VOC Acrylic	FT 1149X	Best
• AF40-200	● Pure Acrylic (Coming in 2021)	FBA 1115 FBA 8315	Best Best
	● Low VOC Acrylic	FBA 1118 GL FBA 8218 GL FBA 7918 GL FBA 8318 GL	Best Best Best Best

Good = Requires heat lamination for foam tear.

Better = May achieve foam tear without heat lamination.

Best = Foam tear at room temperature lamination.

Bonding Study: Woodbridge AutoBond Flexible Foams

For more information about Woodbridge AutoBond Materials visit,
woodbridgegroup.com/Products/Flexible-Foam.

To identify the Avery Dennison Core Series adhesive ideal for your application, please refer to the Core Series Product Selection Tool. Using the Core Series' simple four-step adhesive selection process, you will be able to find the product that best suits your needs. The Core Series Product Selection Tool is available at tapes.averydennison.com/coreseries.

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