



# VHB™ Tapes

## 4611 and 5952

*New products for fast, permanent attachments in metal electrical enclosures before or after painting.*



For attaching hat channel stiffeners, viewing windows, print pockets, and more in electrical enclosures, new 3M™ VHB™ Tapes 4611 and 5952 help speed assembly, reduce shop noise and mess, and make a better looking product. These new additions to the 3M™ VHB™ Tape line also give you the choice of bonding before or after painting.

### **Key Benefits of Both Tapes for Metal Fabricators**

- Clean, smooth appearance on walls and doors with no spot weld defects and refinishing.
- Pressure sensitive adhesive for quick application with immediate handling strength to speed assembly.
- Strength to replace mechanical fasteners and spot welds in many applications.
- Neat application without the mess, ooze, and curing delay of liquid adhesives.
- Bond and seal simultaneously with durability to withstand vibration, impact, and weathering.
- Listed under UL 746C.

### **VHB Tape 4611 for bare metal**

Bonds bare metal and holds reliably through most paint cycle washes and high temperature baking. Accepts powder coats for a uniformly colored product.

### **VHB Tape 5952 for painted metal and plastics**

Bonds most painted metal and plastic without surface priming or abrading. Specially formulated synthetic adhesive bonds most paints and powder coats, as well as window materials such as glass, acrylic, and polycarbonate.

# 3M™ VHB™ Tapes 4611 and 5952



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Product Number	Description	Adhesive Type	Temperature		Solvent Resistance	Relative Adhesion		Application Ideas
			Short	Long		HSE	LSE	
5952 (45 mil)	Dark gray, closed-cell acrylic foam carrier. Conformable. Good adhesion to many painted surfaces, including powder coated paints. UL 746C.	Synthetic	300°F	250°F	High	High	Med	Bond painted metal, plastics, and glass for enclosure attachments.
4611 (45 mil)	Dark gray, closed-cell acrylic foam carrier. High temperature resistance. UL 746C.	Acrylic	450°F	300°F	High	High	Low	Metal bonding; pre-powder coat paint applications; hat channels and stiffeners.

## Hat Channel Stiffener Cost Comparison

	Spot Welding	3M VHB Tape
Attachment Time	8 minutes (weld + refinish)	3 minutes (clean + apply)
Labor Cost	\$4.00	\$1.50
Material Cost	–	\$1.67
Equipment Cost*	\$0.50	\$0.10
Total Cost	\$4.50	\$3.27
<b>Savings per stiffener</b>		<b>\$1.23</b>

Figures are estimates based on \$30 per hour labor burden rate and a 6 foot long hat channel stiffener.

\* Equipment costs are based on estimated capital equipment expense spread out over the expected life of the machine.

**Relative Adhesion:** HSE – High Surface Energy    LSE – Low Surface Energy

**Note:** This technical information and data should be considered representative or typical only and should not be used for specification purposes.

**For Additional Information:** To request additional product information or to arrange for sales assistance, call toll free 1-800-362-3550. Address correspondence to 3M Industrial Adhesives and Tapes Division, 3M Center, Building 21-1W-10, 900 Bush Avenue, St. Paul, MN 55106. Our fax number is 651-733-9105.

**Warranty:** 3M warrants for 24 months from the date of manufacture, that 3M™ VHB™ Tape will be free of defects in material and manufacture. 3M MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. This warranty does not cover damage resulting from the use or inability to use 3M VHB Tape do to misuse, workmanship in application, or application or storage not in accordance with 3M recommended procedures. **Important Notice:** User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of application. Please remember that many factors can affect the use and performance of a 3M product in a particular application. The materials to be bonded with the product, the surface preparation of these materials, the product selected for use, the conditions in which the product is used, and the time and environmental conditions in which the product is expected to perform are among the many factors that can affect the use and performance of a 3M product. Given the variety of factors that can affect the use and performance of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method of application. **Limitation of Remedies and Liability:** If the 3M™ VHB™ Tape is proved to be defective within the warranty period stated above, THE EXCLUSIVE REMEDY, AT 3M'S OPTION, SHALL BE TO REFUND THE PURCHASE PRICE OF OR TO REPAIR OR REPLACE THE DEFECTIVE 3M™ VHB™ TAPE. 3M shall not otherwise be liable for loss or damages, whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including negligence, warranty, or strict liability.



### Industrial Business Industrial Adhesives and Tapes Division

3M Center Bldg. 21-1W-10  
900 Bush Ave.  
St. Paul, MN 55106  
www.3M.com/vhb



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