

3M[™] VHB[™] Tapes RP45(F)

SKU# 3590 (36Y x 3/8" wide)
 SKU# 3590-6.6Y (6.6Y x 3/8" wide)
 SKU# 3591 (36Y x 1/2" wide)
 SKU# 3591-6.6Y (6.6Y x 1/2" wide)

Technical Data

Product Description 3M[™] VHB[™] Tapes RP45(F) are double-sided pressure sensitive adhesive tapes for bonding a variety of substances including many metal, plastic and painted materials. All tapes come as standard with a paper or polyethylene film layer.

- Product Features**
- Fast and easy-to-use permanent bonding method provides high strength and durability
 - Can be used to replace mechanical fasteners or liquid adhesives
 - Gray, 0.045 in. (1.1 mm) conformable acrylic foam core
 - Creates seal against water moisture, and more
 - Pressure sensitive adhesive bonds on contact for immediate handling strength

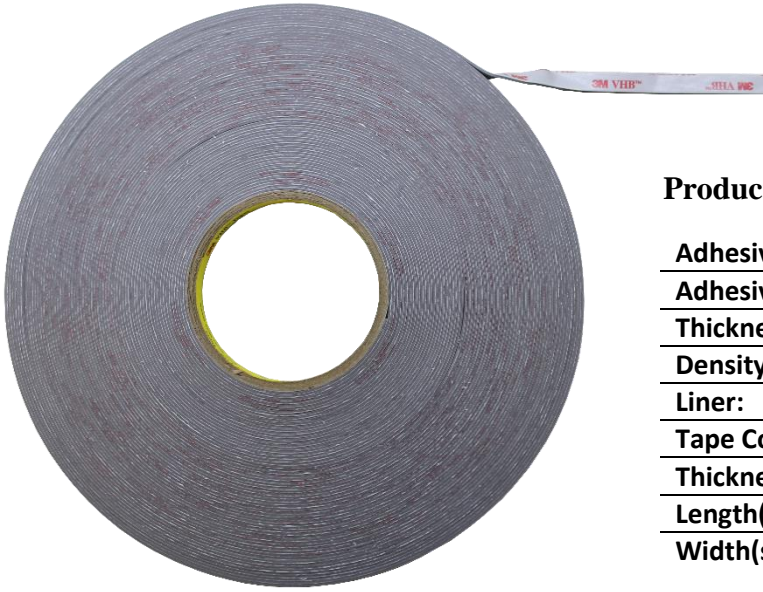
Available Sizes	Standard Length:	6.6 yards (6.04m)
		36 yards (65.8m)
	Standard Width(s): 3M [™] VHB [™] RP45(F) 3/8"	0.375 in. (9.525 mm)
	3M [™] VHB [™] RP45(F) 1/2"	0.50 in. (12.7 mm)
	Thickness:	45 lb./ft ³ (720 kg/m ³)
	Slitting Tolerance:	± 1/32 in. (0.8 mm)
	Core Diameter:	3.0 in. (76.2 mm)

Typical Physical Properties and Performance Characteristics

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

Peel Adhesion: (stainless steel)	20 lb./in. width (350 N/100 mm)
Normal Tensile: (alum T-block)	85 lb./in. ² (585 kPa)
Dynamic Shear: (stainless steel)	70 lb./in. ² (480 kPa)
Static Shear: (stainless steel)	72°F (22°C): 1000 g/0.5 sq. in. (holds 10,000 min) 158°F (70°C): 500 g/0.5 sq. in. (holds 10,000 min) 200°F (93°C): 500 g/0.5 sq. in. (holds 10,000 min)
Solvent Resistance:	High
Temperature Resistance:	Short Term (min, hours): 250°F (121°C) Long Term (days, weeks): 200°F (93°C)

3M™ VHB™ Tapes



Product Construction

Adhesive Type:	Multi-Purpose Acrylic
Adhesive Carrier:	Conformable Acrylic Foam (closed cell)
Thickness:	0.045 in. (1.1 mm)
Density:	45 lb./ft ³ (720 kg/m ³)
Liner:	White DK paper (red 3M™ VHB™ print)
Tape Color:	Gray
Thickness:	45 lb./ft ³ (720 kg/m ³)
Length(s):	36 yards (65.8 m)
Width(s):	0.375 in. (9.525 mm) 0.50 in. (12.7 mm)

Application Guidelines

For maximum bond strength the surfaces should be thoroughly cleaned with a 50:50 mixture of isopropyl alcohol* and water. Ideal tape application is accomplished when temperature is between 70°F and 100°F (21°C and 38°C) and the bond is allowed to dwell 72 hours. Initial tape application to surfaces at temperatures below 50°F (10°C) is not recommended.

* Consult manufacturer's directions for use and precautions when using cleaning solvents. This cleaning recommendation may not be compliant with the rules of certain Air Quality Management Districts in California; consult applicable rules before use.

Storage

Store at 70°F (21°C) and 50% relative humidity.

Shelf Life

When stored under proper conditions, product retains its performance properties for 24 months from date of shipment.

Technical Information

The technical information, recommendations and other statements contained in this document are based upon tests or experience that the manufacturer, 3M, believes are reliable, but the accuracy or completeness of such information is not guaranteed.

Product Use

Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.