3M™ VHB™ Surface Preparation Guide

Surface	Common Concerns	Surface cleaning & preparation	Primer required:
Steel, Glavainsed Steel, Aluminum	Surface oxidation, oil.	1. Clean with HIPA 300 . For heavy oils, clean with 3M™ spray 700. 2. Lightly abrade with Scotchbrite 7447 maroon hand pad or Roloc™ equivalent. 3. Clean with HIPA 300	None required
Copper, Brass, Bronze	Oxidation after bonding	1. Clean with HIPA 300. For heavy oils, clean with 3M™ spray 700. 2. Lightly abrade with Scotchbrite 7447 maroon hand pad or Roloc™ equivalent. 3. Clean with HIPA 300	**Required** Acrylic Lacquer or varnish preferred, Primer 94 can be used as a substitute
Concrete, Brick	Non-unified or rough surface, moisture	1. Remove dust & loose debris with a wire brush, remove all dust with a fine brush or high pressure air.	**Required**: 3M™ Rubber and Vinyl Spray 80 or suitable acrylic paint. Heavily textured surfaces may need to be rendered.
Glass, Stone, Ceramic Tile	High humidity, moisture	1. Clean with hIPA 300 to remove bulk contaminants. 2. Clean with AP-115, wiping solution onto the glass , followed by wiping off to remove excess. Ensure the glass does not appear cloudy. Refer AP-115 Technical datasheet for further details.	**Required in humid environments**: Step 2 adjacent is essential for outdoor use or humid environments such as bathrooms. If AP-115 or other silane coupling agent is not available , apply 3M primer 94 and allow 15 minutes to dry. **Indoor , non humid environments**- none required.

Note : - If hIPA 300 is not available , a 70:30 mixture of pure isopropyl alcohol (IPA): water can be used. Be sure to keep containers sealed to prevent excess IPA evaporation.

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Wood (soft, hard particle board, etc.)		Weak fiber layer on surface (e.g., low surface strength)	1. Sand with coarse abrasive to remove weak fibers, remove all dust with a fine brush or high pressure air.	**Required:** 3M™ Rubber and Vinyl Spray 80 or 3M™ Fastbond™ 30 or Contact Adhesive or paint with Acrylic or Urethane paint.
Plastics:	Polyolefin (ie, Polyethylene, polypropylene)	Low adhesion	1. Clean with HIPA 300 2. If adhesion is still poor, try first abrading with Maroon Scotchbrite™ and clean again	**Required** :3M™ Primer 94 (additional surface preparation may also be required)
	Non-olefin	Additives and low adhesion	1. For heavy contaminants & oils, clean with 3M™ spray 700. If mold release agents present, clean with 3M™ prep-solvent 70 . 2. Clean with HIPA 300 3. If adhesion is still poor, try first abrading with Maroon Scotchbrite™	**Optional :** Primer 94 for lower surface energy plastics such as ABS, HIPS
Polyurethane (Molded or Rubber)		Mold release agents	1. If mold release agents present, clean with 3M™ prep-solvent 70 2. Clean with HIPA 300 3. If adhesion is still poor, try first abrading with Maroon Scotchbrite™	**Optional** Scotch-Grip™ Plastic Adhesive 1099 to improve adhesion
Fiberglass	Rough side	Low adhesion ,poor surface contact	1. Sand smooth with coarse 200 grit abrasive. 2. Remove all dust with a fine brush or high pressure air. 3. Clean with 700 Cleaner	**Required** :3M™ Primer 94 or Spray 80 contact adhesive
	Gelcoat	Mold release, low adhesion	1. Clean with 700 cleaner .	**Optional :** Primer 94 if still low adhesion

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Rubber: Neoprene, Santoprene, natural rubber		Migrating oils Low adhesion	1. Clean with 3M™ spray 700 2. Abrade with Scotchbrite 7447 3. Clean with 3M™ spray 700 For large volumes of heavily waxed rubber , it may be more practical to clean with a less volatile, water soluble cleaner . An example is scrubbing with Printers Screenwash (Glycol ether mixture) and a Scotchbrite 7447 pad, followed by a rinse clean with warm running water. Allow rubber to air dry, then follow up clean with IPA .	**Required** :Plastic Adhesive 1099 or 3M™ Primer 94
EPDM			1. For heavy contaminants & oils, clean with 3M™ spray 700. 2. Clean with HIPA 300	**Required** :Plastic Adhesive 4799 or 3M™ Primer 94
Paints	Brushable or Spray paint	Poor adhesion	1. Clean with HIPA 300 2. If adhesion is still poor, try Primer and or first abrading with Maroon Scotchbrite™	**Optional:** 3M™ Primer 94
	Powder Coated Paints	Waxy layer, low adhesion	1. Lightly abrade with Maroon Scotchbrite™ 2. Clean with HIPA 300 *Note : VHB™ 5952may be suitable for some surfaces without the need for abrasion. The end user should evaluate suitability.*	
Anodised Aluminum		Low adhesion	1. Clean with HIPA 300 2. If adhesion is still poor, try Primer and or first abrading with Maroon Scotchbrite™	**Optional:** 3M™ Primer 94
Flexible PVC (Vinyl)		Plasticizer migration	1. If mold release agents present, clean with 3M™ prep-solvent 70 2. Clean with HIPA 300	**Required** for non plasticizer resistant tapes **:** Spray 80 **Optional** Primer 94 if low adhesion

Note : 3M™ VHB™ wipes can be used in place of 3M™ hIPA clean 300.