



Design and Assembly Success Stories

Fast invisible bonding of skins to hollow metal doors

3M Product 3M™ VHB™ Tape 4611. Dark gray, closed-cell acrylic foam carrier with permanent pressure sensitive acrylic adhesive. Bonds well to bare metal for pre-powder coat paint applications. Temperature resistance up to 450°F (232°C).

Manufacturer Profile Hollow metal door manufacturer.

Application Permanently bond skin to frame or core of hollow steel doors.

Manufacturer Needs Fast assembly prior to painting, smooth exterior surface, and long-life durability.

Previous Methods Welds and spot welds which required surface refinishing; liquid epoxy or urethane structural adhesives which required clamping and drying time.

Manufacturer Benefits 3M™ VHB™ Tape 4611 provides:

- Fast assembly. Bond on contact with no drying time or fixturing, and no weld mark refinishing.
- Bond with permanent high holding strength for static and dynamic loads.
- Viscoelasticity absorbs shock and flexing for long-term reliability against impact, vibration, and thermal expansion contraction.
- Improved sound characteristics. Viscoelasticity damps vibration between the frame and skin.
- Seal against the environment.
- Virtually invisible fastening helps keep surfaces smooth and clean to enhance appearance.
- Holds reliably through most paint cycles and high temperature baking.

