

3M™ Scotch-Weld™ Epoxy Adhesive 1751

3M Product Number 1751

Details

- Formulated to provide excellent adhesion to metals
- Excellent void-filling properties
- Ideal for repairing holes, dents and cracks in metal
- Both sandable and machinable
- Extended work life for troweling and spackling

3M™ Scotch-Weld™ Epoxy Adhesive 1751 is an aluminum-filled, two-part epoxy adhesive that provides high strength rigid bonds to metal. We formulated this epoxy adhesive to be ideal for repairing holes, dents and cracks in metal.



Available in a variety of sizes

Creates Rigid, High Strength Bonds

We formulated our 3M™ [Scotch-Weld](#)™ Epoxy Adhesive 1751 to provide rigid, high strength bonds for metal, wood, masonry and some plastics and composites. It features high viscosity for accurate application, particularly for projects that require void-filling.

Recommended Applications

- Repairing holes, dents and cracks in metal
- Bonding
- Gluing
- Joining
- Attaching

Extended Work-Life Allows Additional Time for Adjustments

This 3M epoxy adhesive has a 3:2 mix ratio by volume and cures at room temperature, reaching its handling strength in approximately 10 hours. Our Scotch-Weld™ Epoxy Adhesive 1751 offers a 45-minute work-life. The extended work-life allows for proper application, positioning and adjustment in order to reach optimum final results for aesthetic results when troweling and spackling.

Understanding Epoxy Adhesives

[Epoxy adhesives](#) are part of the class of adhesives called "structural adhesives," which include polyurethane, acrylic, cyanoacrylate and others. Epoxies are formulated as liquid reactive polymers that undergo a chemical reaction when mixed and then cure to form a solid plastic material. Once the two parts are mixed in their specified ratio, they begin the curing process and offer a limited working time where the adhesive can be applied and the two surfaces positioned as needed. This work life lasts anywhere from a few minutes to several hours. These structural adhesives provide high shear and peel strengths, depending on the formula, and better heat and chemical resistance than other common adhesives. In general, epoxy adhesives have the highest overall strength and offer the best performance and most resistance to high temperatures, solvents and outdoor weathering.

Epoxy adhesive (often referred to as epoxy glue) is widely used in building and home construction; aircraft and automobile manufacturing; bicycle, boat, golf clubs, ski and snowboard assembly as well as a host of home use and other applications. It is used virtually anywhere high-strength bonds are needed along with resistance to environmental conditions. These adhesives are popular for their ease of use, mechanical strength and chemical resistance. Formulations can be created to make epoxy for plastic flexible or epoxy for metal rigid, epoxy resin transparent or opaque, quick setting or slow setting. The versatility with which these adhesives can be formulated helps meet almost any requirement for bonding wood, metal, glass, stone and various plastics.

