## Document ID: 872808

## **Metal Panel Bonding**

Table 1: Steel Panel Bonding Impact Resistant

Table 2: Steel Panel Bonding

This information is intended to provide general guidelines for adhesive bonding of steel panels. Always refer to service procedure for recommended fastening strategy. Panel bonding of steel is recommended when the panel is originally bonded to the vehicle. In almost every application adhesive bonding is combined with resistance spot welding, rivet bonding or other types of mechanical fastening. The only joints that use adhesive only are joints which have no way to introduce a resistance spot weld or rivet or other mechanical fastener. These will always be outlined in their specified procedure.

The adhesives listed in this document are known to meet the General Motors specifications and requirements for bonding of steel body panels.

Bonding procedures in general are applicable only at factory joints.

The use of adhesive to section steel panels is not recommended by General Motors.

Rivets, or other mechanical fasteners, need to be used in combination with adhesive bonding of steel panels. The specified rivets, or fasteners, should be used with adhesive, when replacing the original panel.

Two types of adhesives are listed here. Impact Resistant Adhesive is used in joints in frame rail assemblies and strut tower assemblies and other body structure joints that have critical strength requirements. The factory applied Impact Resistant Adhesive is purple in color when cured. The Impact Resistant adhesives available for servicing these joints are considerably stronger once cured than panel bonding adhesives. The other bonding adhesives are non-impact resistant, offer a lower strength rating and are only used in door outer panel attachment hem joints.

Note: Always follow the adhesive manufacturer's instructions for application, handling, and curing for the specific product.

Adhesives currently meeting the performance requirements include the adhesive products listed below meet these guidelines:

## **Steel Panel Bonding Impact Resistant**

Manufacturer and Part Number	Description
Pliogrip 5770P	Pliogrip 5770P Structural Impact Durable Adhesive Available from Ashland 800-PLIOGRIP www.ashland.com/pages/pliogrip-5770

General Motors. All rights reserved.

Manufacturer and Part Number	Description
Fusor 2098	Fusor 2098 Impact Resistant Adhesive Available from Lord Fusor 800-234-3876 https://www.lord.com/products-and-solutions/adhesives/fusor- 2098-crash-durable-structural-adhesive-%28slow%29
3M 07333	3M Impact Resistant Structural Adhesive Available from 3M www.3MCollision.com/IRSA
SEM 39757 Structural Impact Resistant Adhesive	www.semproducts.com/product/dual-mixtm-structural-impact- resistant-adhesive/39757
Henkel Teroson EP5065 Structural Impact Resistant Adhesive	www.Henkel-Adhesives.com

## **Steel Panel Bonding**

Manufacturer and Part Number	Description
Lord Fusor P/N 110B/111B	Fast Set Panel Bonding Adhesive
Lord Fusor P/N 108B/109B	Medium Set Panel Bonding Adhesive
3M P/N 8116	Panel Bonding Adhesive
Ashland Plio Grip Panel 60	Panel Bonding Adhesive
SEM 39337	Door Skin and SMC Adhesive